

Arrests climax DC protest

By Pete Peckarsky

WASHINGTON-A week of radical protest in Washington culminated late Tuesday night with the arrest of 298 demonstrators one block from the White House grounds.

Tuesday's activities began at noon with a rally featuring comedian Dick Gregory at the Silban Theater on the Washington Monument Grounds. According to the original permit negotiated with the Justice Department, the rally was to have taken place on Monday afternoon and was to be followed by a candle-light procession around the White House

and back to the Silban Theater. A torrential downpour aborted these plans and forced the People's Coalition for Peace and Justice (PCPJ) to do some fast shuffling, rescheduling and negotiating with the government. The group had a permit for a memorelipse between the White House Tuesday morning at 11. This service was to be followed by an attempt to serve an eviction notice on President Nixon in the White House.

As the result of the rainstorm, both days' activities were consolidated into one day, beginning Tuesday at noon. Various entertainers, including the San Elephant's Memory performed from noon until 2 pm at the Silban Theater, when a series of speeches began. Carol Kitchen, a leader of the PCPJ, introduced the speakers. Dave Dellinger, a defendant in the Chicago Seven conspiracy trial, led off with an introduction of Dick Gregory.

Gregory, who last April 24 at a mass demonstration on the steps of the Capitol vowed not to eat solid food again until the war in Vietnam was ended, cracked a few jokes about his fast, during which he has lost 67

This Sunday, Massachusetis will return to Eastern Standard Time. The lucky denizens of the state will get an extra hour's sleep Saturday night if they remember to set their clocks back one hour before retiring. (Officially, the change will occur at three am Daylight Savings Time, when it will be two am, EST.)

pounds, and launched into an el returned a resounding verdict attack on the Nixon administra-

Addressing approximately 700 people gathered for the rally, Gregory argued that smoking marijuana and using heroin as a way of attacking the system is misguided because it is the system that allows narcotics to enter the country. The crowd responded with something less than overwhelming enthusiasm. He urged the people to act responsibly to end the war, and said: "My hope of ever eating again rests in your hands."

The comedian then gave his plan for ending the war in thirty days. He posited that if at the November 6 marches throughout the country the youth of the America were to announce a boycott of various products, the economic interests affected would react so strongly that ial service to be held on the President Nixon would be forced to end the war. "When you and the Washington Monument youngsters say on November 6 that you're going to boycott Thanksgiving turkeys and Christmas turkeys and Christmas itself, with the economy the way it is, the boycott will mess up Phase Two, Phase Three, Phase Four and phase him right out of the White House," he expostulated. Gregory maintained that although blacks did not have the Francisco Mime Troupe and The money to travel to Washington for rallies, they could boycott these items in their own communities.

A special People's Panel, subtitled "The Grand Jury Investigation of Citizen Grievances and American Power," met from Friday afternoon, October 22 until Sunday evening, October 24. Throughout the weekend, witnesses appeared before the panel. Friday afternoon, an initial set of witnesses gave introductory "testimony." In the second session that evening, the investigators concerned themselves with alleged prison injustice. The war in Indochina and the American empire were the topics of the third session on Saturday morning, and a fourth session that afternoon continued this theme. The fifth session on Saturday evening dealt with economic repression. The final session of testimony on Sunday afternoon examined allegations

of domestic repression. At the rally, the People's Panof guilty on all counts, and charged the American ruling classes with being racist, sexist and imperialist powers.

Rennie Davis then explained the purpose of the intercontinental phone call which was about to be placed to representatives of the Provisional Revolutionary Government (PRG, the political arm of the Vietcong) and the Democratic Republic of Vietnam (DRV) in Paris. Davis said they could reiterate their seven-point peace plan which was offered this summer. The plan includes the immediate commencement of the release of prisoners of war, an immediate cease fire, and a coalition government open to everyone except South Vietnamese President Nguyen Van Thieu.

Davis said that the PRG and the DRV would accept veterans of the South Vietnamese army. school teachers, and the entire current government, with the exception of Thieu, into the coalition. The plan is only contingent on the setting of a specific date by President Nixon at which time all forces, including air and artillery support, would be withdrawn from use in Vietnam,

(Please turn to page 14)

Professors find fault with evaluation

By Alex Makowski

Faculty reaction to the public cation in The Tech last Friday of an undergraduate evaluation of instructors in the history section was mixed, but in general professors believed such a public airing of student judgements to be both unwise and not valuable.

"If the aim is to get any change," commented Professor Arthur Mattuck, coordinator of the undergraduate program for the Mathematics Department. "this is the worst possible way to go about it."

"The most useful feedback," suggested Paul Brown, chairman of the Department of Economics, in a remark typical of those made by other department heads reached by The Tech, "is the comments we get at small, informal meetings between students and faculty.'

Of a sample of half a dozen department heads, only Electrical Engineering Chairman Louis Smullin was not critical: "I wouldn't presume," he said, "to tell the students how to watch out for their interests as a consumer group."

Within the Humanities Department and the history section themselves criticism took the form of complaints about the absence of a statement describing either the data base or the sampling method, and dissatisfaction (mirrored in the comments of other departments) with the subjective tone of the report.

The Tech also sought information about current feedback mechanisms within departments. The electrical engineering honorary, Eta Kappa Nu, is now in its second year of an experimental evaluation of the departmental undergraduate program, while the Economics Department relies on informal meetings between its undergraduates and faculty. None of the other departments have a regular mechanism to solicit comments on teaching from undergraduates.

Although all of the department heads supported the princi-

ple of student evaluation of faculty and departmental performance, most found much to criticize in the particular attempt published Friday. Mattuck was disappointed that the survey merely "advertised what was bad, rather than offering constructive criticism. The aim," he continued, "should be to improve faculty performance, rather than to tell students which courses to take."

Please turn to page four for commentary on the issue of teacher evaluation, and a series of letters commenting on last week's article.

Mattuck and two or three department officers mentioned a Harvard faculty evaluation project that has been underway for several years. Each year the Harvard Crimson; the student daily newspaper, publishes a guide to one or two hundred required and popular courses. The guide staff rely on forms circulated among students, asking them to evaluate both the course and the professor.

Those MIT faculty who mentioned the Harvard project all agreed that it did little to improve teaching performance. Mattuck said it might be counterproductive by driving away good professors who might not wish to subject themselves to the style typical of the guide's evaluations, while Humanities Chairman Richard Douglass charged that the comments seemed written more for humor and wit than constructive criticism.

The review of faculty performance in last Friday's The Tech was the result of efforts last spring by seniors in the department led by Bruce Wheeler and Mitchell Serota. The evaluation divided the faculty into three categories: "highly recommended," "recommended," and "not recommended." Three professors were not evaluated; the review stated that there had not been enough student input.

CJAC views hiring policy

The Corporation Joint Advisory Committee listened to Opportunity Development Officer James Allison discuss MIT's plans to hire more blacks and women at MIT.

At CJAC's October 21 meeting, Allison began by giving a rundown on the progress to date in integrating minorities and women into the MIT community. Commenting specifically on the recruitment of blacks, he noted that very good progress has been made in all areas except employment. In particular, his office has been instrumental in securing sub-contracts worth about \$352,000 last year for black contractors.

The work of the Opportunity Development Office and of MIT is being closely watched by the US Department of Health, Education and Welfare. Starting in 1969, HEW began to lay down guidelines for colleges in connection with the hiring of women and minority groups.

As a result of its own plans, and in compliance with the HEW directives, MIT presented a plan which called for the hiring of about thirty minority employees (mostly black) and approximately 35 women in positions as faculty members.

The figures were derived by combining the numbers supplied by each department in its Affirmative Action Plan. The plans were developed to specifically show the objectives of the departments in bringing in blacks and women. As was noted by President Jerome Wiesner, who also attended the meeting, the numbers "just represent what we really think we can do."

When asked what resources he had for finding qualified prospects, Allison answered that his contacts reached across the country. "We will try to steal

people who are under-employed or under-utilized with no reservations," he said.

Wiesner promised to "provide a more flexibile career pattern for women," and hinted that much would be done to provide a receptive environment for the new workers.

Allison then addressed himself to the question of tenure and promotions. He explained that emphasis has been taken off bringing in the hard core, and has been shifted to recruiting qualified and qualifiable people. Further, he admitted that there may be a few problems incurred in turning down applications for tenure or promotions for people employed under the Affirmative Action Plan. Still, he argued, the number of people involved in such decisions would probably be much smaller than the number of new employees who would themselves decide to leave.

Rebate check delivery delayed by mis-sorting

By Paul Schindler

Many unsuspecting MIT Coop members were treated to an unpleasant surprise when they went to pick up their rebate checks at the Tech Coop. They were informed that the checks were at Harvard. They were then asked to sign up for the checks to be transferred to Tech for retrieval.

After 8 days, holders of the confused numbers were still being told that none of the problematic checks had been moved yet.

Persons affected are mainly those who signed up for their Coop cards by mail, before the start of the school year. Their numbers were not part of the MIT "Block" and, according to Coop Controller Fred Fox, even some of those who signed up after the start of school might be affected.

"In the fall of 1969, the Harvard Trust Company took over issuance of our membership cards. Prior to that, with few exceptions, the numbers were issued in blocks: a certain number to each location. We had blurred the distinction on occasion, but the Harvard Trust virtually ignored it . . .

"Our checks are printed by computer, and cannot be sorted by location, only by Coop number. As a result, we have to sort them as close to the old numbering system as possible, and hope for minimum disruption . . . "

Fox went on, "Next year, we might try putting all checks in one location for one week, another the next week, and so on, in rotation."

When asked about what snafu had resulted in the nondelivery Advisory Committee has the resof checks to the Tech Coop, Fox ponsibility of assuring conforconfessed ignorance of the exact mation with Federal and state cause, but bemoaned the general labor problem in retail work: "We're pretty far down the wage scale. Most of our people are damn good and conscientious. But send me five good clerks and I'll hire them tomorrow."

No firgures are available on the extent of the problem, but observation revealed at least two separate sign-up lists on various occasions, for an estimated minimum of 75-100 members directly affected by the snarl. According to Fox, a simple directive in inter-store mail should result in action within 2 days.

Report urges proxy panel

By Pete Mancuso

An Institute study has reccommended the establishment of a special committee to research issues connected with proxy vot-

Entitled "University Investing and Corporate Responsibility, the work is the result of a summer study conducted by Edward H. Bowman, Professor of

Management.

The study project was first announced in a Corporation Executive Committee's subcommittee report last May 7. At that time, Bowman was placed in charge of an investigation into the questions of 'corporate democracy,' public policy, and social responsibility."

The Bowman report recom-

Watchdog panel set for pollution controls

The Institute's Ecological pollution controls and initiating any other improvements that are feasible.

Composed of only three members. Phillip A. Stoddard, vice president for operations, Donald Whiston, associate director of physical plant, and David Wilson, professor of mechanical engineering, it is not really a committee. Also, the group is not advisory in its capacity; if a problem occurs, appropriate action will be taken.

Some of the conditions which come under the committee's jurisdiction are the recent required change to very low (0.5%) sulfur content oil, checks on the emissions from the power plant stack, the trial recycling project being run by students, and the possibility of composting.

Professor David Wilson acts as the advisor and says, "I've found myself in the position of MIT's official ombudsman." He is presently working on a trash separator that uses several types of sensors, including infra-red and impact, to separate the trash from a few inches to a foot in

size into streams of valuable material. Work is under contract with help from the Environmental Protection Agency and with the help of the EE Department, especially Professor Senturi, it is almost ready to undergo serious testing on a small. scale.

Other projects underway include a small trash grinder in Building 56 which turns out compacted material that can be used as wall board or fire fuel. Most incinerators have been closed down, they are now only used to destroy dangerous materials, and the Institute is relying mostly on compactors although this results in the costly necessity of increased towage. No effluent is being released into the Charles River other than a warm clean water stream which the Magnet Labs use for cooling.

Lastly, composting is being considered, but because of the problem of diseases such as Dutch Elm, vine and grass disease, and danger to some already ailing sycamores, the Waltham Experimental Station is being consulted on the advisability of composting on campus and sterilization of the waste.

mends the establishment of some "CJAC [Corporation Joint. Advisory Committee]-type" committee, or perhaps using CJAC, itself, for the purpose Between six and ten people, including Corporation Members, faculty, students, and possibly administrators and alumni, are suggested.

The committee would both openly discuss issues and "he available when any of its mem. bers, or a member of the Corporation, or any member of the Institute, by way of special of fice, raises an issue of social responsibility and University Investing." The paper recommends that the committee be ad-hoc in nature at present, due to a lack of formal guidelines.

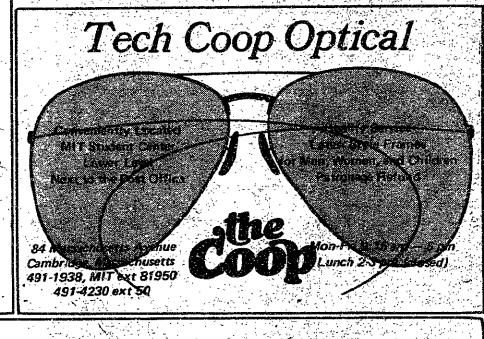
There are also certain suggestions in the report for initial and continuing investments. Initial investments should be made in industries which provide a "maximum return with an acceptable degree of risk." In exception to this are those "flagrant cases" of industries lacking a mandatory amount of social consciousness. "Low return investments in worthy projects or social benefactors" are also to be avoided.

The rationale presented in the report for these recommendations is that the Institute has a responsibility to take part in "socially useful endeavors" only when they directly pertain to the basic goals of MIT. These, of course, are science and research. Action should be "substantially more limited and circumspect" when the endeavor is independent of these goals.

In the case of a continuing investment, the report suggests that the Institute should not sell stock in any concern due to some disagreement. Proxy voting, however, is recommended only in more simple cases. According to this paper, the more complex an issue, the greater should be MIT's reluctance to vote its proxies.

These recommendations are presented in the fourth section of the Bowman report, titled Recommended Options for MIT." Preceding sections deal with the role of an institutional investor, the nature of corporate responsibility, and the possible ptions that exist for all univers ities. An attempt has been made to examine these problems from economic, moral, pragmatic, and legal standpoints, while presenting the various options available in each case.

The report is available in the Information Center in the lobby of Building 7 and in Walter Milne's office.



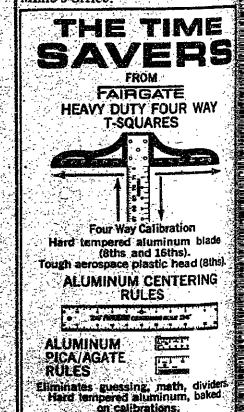
BIG BARGAINS Modern Architecture NOW

Neutra 1923-1950 18.50 7.95 1950-1960 18.50 7.95 7.95 7.95 1960-1961 20.00 Arne Jacobsen 20.00 7.95 New Italian Architecture Gallardi 7.95 New Danish Architecture 20.00 Concrete Architecture of R. Morandi 20.00 7.95 Guide to Finnish Architecture 10.00 4.98 15.00 5.95 The New Schoolhouse Roth Glass in Modern Architecture of the Bauhaus Period Korn 15.00 7.98 Expositions, Exhibits, Industrial and 5.95 Trade Fairs Clasen 17.50 Shops and Showrooms Kaspar 17.50 LOTS MORE BARGAINS TOO!!

BOOKS AND RECORDS

423 Boylston Street Boston, Massachusetts

Watch for collection bins in Building 7



TANK DUTY

O FAINGATE

RULE COMPANY, Inc. Cold Spring, New York 1051



Oded Feingold



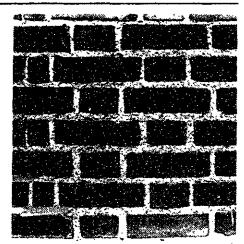
Mr. Natural



Ugleon



Paul A. Wagoner



Hermann Quincy Witherspoon Photos by Sheldon Lowenthal

Uglies come to scratch for campus crown

The Ugliest Man on Campus contest for 1971 got underway Tuesday night, at a raucus meeting in the Alpha Phi Omega Office. Even with only three of the seven determined contestants present, the meeting quickly degenerated until all UMOC chairman Chuck Rosencould manage was to scream instructions to the parading uglies.

Campaigning, Rosenblatt declared, will begin at 9 am on Monday, November 1, and conclude at 5 pm Friday.

This year's official candidates

Crud the Spud (Mr. Unnat-(ual), sponsored by the Eta Potato Spudhouse. In his statement of qualifications, the Spud claims that he is "easily worth less than hemorrhoids of equal weight." His face, the petition states, "had been known to turn marble statues into lukewarm rancid yogurt." The Spud claims to have been recommended "as a natural for the job" by Matt "The Beast" Beasley, who reportedly declined to enter the race after smelling the Spud. Crud the Spud lists as his domicile the Charles River at 147 Smoots east, but this reporter was unable to find any sign of life in the vicinity (although sonic probing did reveal an iron and concrete safe at 69 Smoots).

R. Davies deBronkart, Jr., sponsored by, alas, The Tech. DeBronkart, who uses "Crisco hair tonic" on his "dirty brown" hair, was once one of MIT's "successful stud pols" (rumor has it that he is closely connected with a number of poles that have recently sprung up on campus, although Physical Plant made no comment on the matter to this reporter). Sporting two eyes, "ranging from blue to black," deBronkart terminated his petition with the warning "Caveat Emptor. . .'

Oded Feingold, sponsored by MIT Hillel. Feingold, whose petition is nearly illegible due to some basic flaw (reportedly his ugliness itself), in addition to being written; in large measure, in a foreign language that appears to resemble German, although it was impossible to verify this by means of expert analysis as The Tech was rushing to print, pleaded "the fifth" to APO's requests for certain information, but apparently is being excused by the UMOC rules committee for this omission. His campaign manager, when queried by this reporter, admitted "there isn't much good to say about him," but prosied that Feingold's chances of winning were "fantastic" as he

Relax and Divert

590 Commonwealth Ave. (Opposite B. U. Towers)

Pocket Billiards

"Great for a Date"

in."

Mr. Natural, sponsored by years later, he claims he was position of "errand runner" for a drugstore on Chicago's north side. By 1923, he was selling "wonder drugs" under the alias "Dr. Von Naturlich," but two years later, he was sporting his talents in Vaudeville. He later moved to Skid Row, and worked at odd jobs on the West Coast. From 1943 to 1953, Mr. Natural travelled through the Middle and Far East and worked as a taxi driver in the Himalayas. In '53, however, he returned to America and went to Death Valley "to start anew."

Ugleon, sponsored by (don't tell anyone but ...) Chi Phi. Ugleon, whose height is "ethereally high," claims to be so ugly that: "Fellini gagged; sidewalks

Read Compliments of a friend,

was prepared to "buy himself dogs) turn him down." His hair, he reports, exists in "liberal amounts, liberally dispersed over Sigma Phi Epsilon. Mr. Natural, key areas." Ugleon protests that well-known as a "powerful spir- his nose is "usually in the way," itualist," was born, according to but is "trimmed at the chin his petition, in 1871. Some fifty regularly." Ugleon appeared at the special UMOC confrontation able to advance himself to the under the guard of his trainer, that is, his campaign manager, who kept him tightly bound in thick heavy cord at almost all times, and who could occasionally be seen whispering into his

> Paul A. Wagoner, sponsored by Phi Beta Epsilon. Wagoner, who claims to be very dedicated to his foolishness, posed a perplexing problem for his official photographer by his insistence on being photographed in the darkroom. (The Tech, using its extensive leverage, however, was able to persuade Wagoner to stand for a picture in a more advantageous location. His



greatest ambition, according to functioning and his waist is his official petition is to be "Great Court Jester," and "to pop balloons."

Hermann Quincy Witherspoon, sponsored by Burton. According to Nicholas Nussbaum, Witherspoon's campaign manager, "Hermann is so transcendentally ugly that the seminormal human mind refuses to register him." Witherspoon's nose is reportedly non-comment from the CAP).

immeasurable, while his height is undefined (reputedly, his ugliness, as noted above, makes it impossible for human minds to measure him). Witherspoon, who was to have graduated last June, according to his petition, earned a cumulative grade point average so low that instead he was readmitted to MIT this fall as a freshman (this reporter heard no



FRIED RICE, LIVE ROCK ENTERTAINMENT

MONDAY NIGHTS THE BEST HAPPY HOUR IN THE CITY 2-4-1 BEER: ROCK MUSIC CONTINUOUS ENTERTAINMENT casual attire

ALL THIS AND MORE AT. L KENMORE CLUB KAMMORE Sq. members, questa

Savings Bank Life Insurance

It is America's lowest cost life insurance for all Ordinary Life, Endowment, and Renewable Term policies.

Get the facts and low cost soon for your exact age. It will be worth your time to come in and see us. 864-5270 or 876-2240

LIFE INSURANCE DEPARTMENT

CAMBRIDGEPORT **SAVINGS BANK**

689 Massachusetts Avenue

Right in Central Square Within easy walking distance of MIT

shelfworn, slightly damaged, overstock copie November 3 12:00 - 9:00 November 4 10:00 - 8:00 November 5 10:00 - 4:00

Bruce Weinberg, Chairman Robert Fourer, Editor-in-Chief Robert Elkin, Business Manager Bill Roberts, Tim Kiorpes, Managing Editors Lee Giguere, Paul Schindler, News Editors Joe Kashi, Michael Feirtag, Alex Makowski, Bruce Schwartz, Contributing Editors Randy Young, Brad Billetdeaux, Sports Editors Sheldon Lowenthal, Dave Vogel, Photography Editors David Searls, Arts Editor Leonard Tower, Advertising Manager John Kavazanjian, Editorial Consultant

Second-class postage paid at Boston, Massachusetts. The Tech is published twice a week during the college year, except during college vacations, and once during the first week in August, by *The Tech*, Room W20-483, MIT Student Center, 84 Massachusetts Avenue, Cambridge, Massachusetts 02139. Telephone: (617) 864-6900 ext. 2731 or 1541.

- The final date to make a change in registration without a process charge is Dec. 1, not Oct. 29 as shown on some Academic Calendars. Dec. 1 is also the final date to drop a subject by correction card.
- Today (Friday) is the deadline for changes by fourth year students of elective subjects to be graded on a pass-fail basis.
- * ERC Colloquium: "Non-Regular Education," speech by consultant to the President and Provost, MIT. 12 noon, Friday, Oct. 5, the Bush Room (10-105). General public invited.
- Would you like to take a course covering the entire range of Urban Problems? Urban Action is thinking about starting one. If you would like to see such a course exist, come to a meeting on Monday, Nov. 1, 7:30 pm, Student Center Room 437.
- * Dr. Scott Nearing and Mrs. Helen Nearing will be speaking at McCormick Hall's Green Living Room on Oct. 31 at 8 pm on "The Future of the U.S. Economy: Where Is It Going?" The Nearings have been active in the peace movement for several decades, are vegetarians, and followers of Tolstoy's teachings. Dr. Nearing has written over 50 books (Poverty and Riches, Where is Civilization Going?), some of which he has coauthored with his wife. The event is being sponsored by MIT Hillel.
- A seminar-discussion on the role of technologists can take in aiding environmental concern groups will be sponsored by the Nuclear Engineering Department and the student chapter of the American Nuclear Society on Wednesday, Nov. 3, at 3:30 pm in Room 9-150.
- Competition for D.A.A.D. fellowships closes soon. MIT is awarded one Scholarship for the academic year 1972-73. The awards are valid for a course of study or advanced training at universities, technical universities, and academies of art or music in the Federal Republic of Germany. The award covers tuition, travel expenses, and a modest living allowance. Further information may be obtained from the Foreign Study Office, Room 10-303, x5243.
- The week of Nov. 1, Nominations Committee will be holding interviews to fill existing vacancies on student-faculty committees. Information on what vacancies exist, and further information on the committees, will be available in the Undergraduate Association office, Student Center
- * The Cambridge Morning Center offers a safe, creative, educational environment for your child. 3-5 yr. olds accepted. Half-day service, Mon. thru Fri. For more information call 354-7984.
- Wanted: 3 or 4 men to form male nucleus for a semi-resident acting company. Mixed season, variety of roles, small honorariums. Call: Theatre Dept., Wheelock College, 734-5200, x226.

For further information on these opportunities, call or visit David Burmaster, 20C-230, x4849:

The Town Manager of Ipswich seeks to interview students for possible internships. The Boston Museum of Science seeks students interested in science education, through displays, demonstrations, and lec-

The Children's Museum seeks students to help design and operate The Visitors' Center.

The Water Quality Office of the Environmental Protection Agency, JFK Bldg., may be able to assist students on UROP projects.

The Council on Economic Priorities, in New York City, seeks one student to help study the Route 128 complex for later journal publication.

Student comment on history ratings

To the editor:

I recently received a mimeographed copy of a student evaluation of history faculty accompanied by a covering letter from Mr. Bruce Wheeler and Mr. Mitch Serota requesting that I read the evaluation and return an enclosed postcard if the evaluation were "to my liking." Alternatively, I was told (in a postscript) that if I found the evaluation "not acceptable ... for substantive reasons" I might express these reasons in a letter to [Pete Messeri, chairman of the Student Committee on Educational Policy, who received another copy of this letter]. Since I do not agree with the findings of the authors, since the evaluation is not acceptable to me for substantive reasons, since I consider it grossly unfair and inaccurate, and since there was no postcard in the mailing I received, I am taking this opportunity to explain at length why I feel the evaluation is worse than useless, that it is harmful, irresponsible, and sets back rather than advances the case in favor of increasing student participation in decision affecting teaching and curricula, besides doing injustices to the teaching ability of many of the instructors it purports to evaluate. I have also discussed the evaluation with a friend who is also a former student in the history department, Mr. Lewis Reich; this letter is a joint expression of our views.

A student evaluation should be useful to both students and faculty. For students, an evaluation should provide information that helps in making decisions for the intelligent selection of courses. For the faculty, a student evaluation should provide a carefullyconsidered, often-needed appraisal of the effectiveness of their teaching from the student's viewpoint.

The present evaluation fails in these critical functions so dismally that one is inclined to wonder why it was written at all. It is not only arrogant and presumptuous but embarrassingly dogmatic to label one group of professors as "highly recommended" for all students and another as "unrecommended"; in their enthusiasm the authors must have overlooked the obvious truism that one professor cannot be "right" or "wrong". for all students. The authors make no mention of specific courses, only of instructors; apparently they assume that all courses given by an individual instructor are equally worthwhile. They provide only the barest indication in a few isolated instances of the instructors' main field of interest. No specific information is provided about course content, organization, goals, or effectiveness. Instead, we are presented with what can only be described as attempts; at summarizing some vaguely-drawn "classroom personality" of each instructor; a factor, one would think, of only marginal importance in an overall appraisal of the value of specific courses. The authors are attempting to tell students whose courses they think are worth taking, rather than providing information that is useful in helping a student make an intelligent selection on his own. The evaluation is misguided in its fundamental approach; it would have been much more effective and useful if it had appraised specific courses as taught by specific faculty members.

The abysmally poor writing and production that characterize the evaluation are worthy of consideration only because they confirm the lack of care and casually irresponsible approach which are manifest in the content. One would have hoped that those concerned with gaining respect and attention for the student body's regard of teaching in a given department would have seen to it that the first public expression of their opinions would be worthy of consideration and likely to establish a certain credibility and perspicacity for the authors. Instead, were are treated to a document whose very uselessness raises the question of. why student opinion should be consulted at all, if this is the best that a concerned and supposedly responsible student view

To be useful, an evaluation should cover individual courses as taught by particular faculty members. If a course is taught by several professors, as some of the introductory courses are, then each section should be evaluated separately. The evaluation should follow general

guidelines that convey specific information about courses, for example:

Course content:

What is the real content of the course, not the often outdated and frequently ignored catalogue description?

Is the material well-integrated?

How much material is covered? in what depth? at what pace?

Is the course flexible? or is there a fixed syllabus of topics?

Does the material relate to history as a discipline?

Professor:

How is the course taught? lecture? seminar? individual papers? projects?-

Does the instructor prepare his material? Do students participate? Class discussions: liyely? boring? nonexistent? office hours? is professor available? willing to see students?

Administrative details:

How large is the course? How much reading, writing is required? When is material due? Criteria used in grading?

Since professors tend to learn from their successes and failures, courses tend to change in approach, content, and orientation from semester to semester. Therefore, a student evaluation must be current to be useful; it should indicate which semester and year the course was evaluated and should be revised at least each year.

As history majors we were saddened that the first student evaluation of history proved to be so thoughless and irresponsible; certainly a more useful evaluation is possible. Although we still believe that the idea of a student evaluation of history courses is an excellent one, we cannot under any circumstances endorse this first student evaluation. Marc D. Silverstein '71

Lewis B. Reich '71

To the editor:

As one who has taken a fair number of courses in history, both for credit and as a listener, I must take strong exception to the evaluations compiled by Bruce Wheeler and Mitch Serota which you printed last Friday.

I am most startled by the fact that, to

professors are completely wrong. For example, I find Prof. MacMaster to be the best humanities instructor I have had at MIT. I am now taking a second course in Russian history from him, as a listener simply because I find it to be an extremely good course. I have found that his lectures, at least in these two subjects. have been well organized, well prepared and interesting. I have never seen an example of his being "autocratic" or "authoritarian." On the contrary, he is always willing to discuss, and often will agree with points brought up by students I believe that while he may be hard in grading and somewhat inflexible in assignments (although not very), his

assignments are geared very well to those

who are interest in learning about the

subject, rather than those who are used to

an easy A or B in humanities for

practically everyone in the course.

me at least, two of the summaries about

On the other hand, I felt Prof. Mahoney to have been a very poor instructor in the course that I took from him, 21.548. I am told, and I think reliably, that his course on Cambridge politics is quite good. But in 21.548, I thought he was extremely boring and very disorganized. He had a habit of going off on enormous and quite irrelevant tangents (I think this is what the evaluators call "full of stories... and anecdotes"). He was so concerned with getting detailed facts before the class and telling his anecdotes, that his lectures lost any logical sequence and little effort was made at any but the most superficial analysis of trends or comparisons. All of this was coupled with spending a fair amount of time reading aloud the text in

In talking to some other people who have taken these same course and other history courses, I find that opinion varies widely, although those currently in Prof. MacMaster's class seemed to think, on the whole, that he was quite good as an

I think all of this points up several problems with instructor evaluations. First, the quality of an instructor may vary from course to course, depending on his particular knowledge, enthusiasm, and love of a particular subject. Second, there is a severe difference in criteria between those who are genuinely interested in

How evaluation was set up

This is the memorandum sent to all members of the History Section by students Bruce Wheeler and Mitchell Serota last spring. They used the responses received as a result of their efforts to write the evaluation of History Section teachers printed in The Tech last Friday.

5/3/71

TO: All History majors From: Committee of Concerned **History Students**

Re: Student Evaluation of History

Courses at MIT Last year, the History Section formally adopted a policy of soliciting evaluation of history teaching by all students taking history courses for use in tenure and promotional recommendations of history faculty. In keeping with this commitment, Prof. B. Mazlish, at that time chairman of the section, claims to have sent out 1700 letters last summer seeking this evaluation by students. Many history students have not received that letter, and many more still do not even know they were supposed to have received it. Asked why he only received 35 responses from 1700 letters, Mazlish commented that the students were not interested in taking part in the evaluation.

Prof. N. Sivin undertook an investigation of the student evaluation program, and resigned from the section immediately after making a preliminary report which indicated that the evaluation program had been sabotaged. After his resignation, the faculty investigation was not carried further.

To investigate the matter for students, a committee of three, Bruce Wheeler, Mitch Serota, and John Pilat, had a series of talks with the present chairman of the history section, Prof. R. MacMaster. On Friday, March 19, the committee and Prof. MacMaster made a questionnaire and agreed to send it to all Humanities courses for all students who had taken any history course in the last two years to fill out. Prof. MacMaster decided over the following weekend that he could not "dictate" to the history section that each professor be evaluated, despite the fact that this was already section policy.

We therefore seriously question the credibility of Mazlish and MacMaster. We wonder, if they don't think students are interested in the quality of their reducation, how interested they are in the quality of teaching their section is giving us. Realizing that they do not especially desire to cooperate with us, our committee now seeks the help of all history majors to do the following:

1) write one or two paragraphs on every history course taken at MIT in the last two years.

2) contact Mitch Serota, x2889, 547-8098, dl 0-477 (keep trying and leave messages), to help organize a booth in bldg. 10 to distribute our evaluation forms.

3) show up at the booth next week to sign up for a few hours of time that you can spare (after all, there are 45 of us). We must organize ourselves since seniors cannot do the work alone, and juniors and sophomores must carry the responsibilities after we leave. It is essential that we produce a pamphlet of some kind before the end of the term so that we can better influence decisions of the history section. Please help us.

Sincerely yours, Bruce C. Wheeler Mitch Serota

Grading teachers: an over view

By Alex Makowski

The publication in last Friday's issue of The Tech of a student evaluation of MIT's history faculty has forced for the first time in the past few years a discussion of the issue popularly raised as "students grading teachers." Apparently something of the same sort was tried ten years ago for the professors who taught core subjects (one or two senior faculty alluded to it), but even the mild surge of enthusiasm for educational reform among undergraduates three years ago never resulted in so concrete an achievement as distribution of a review of the performance of one section's entire faculty.

What was the point of it? And what should be the point? Bruce Wheeler and Mitch Serota, the two seniors who provided much of the student push for the evaluation, have both left MIT, so their motives can only be guessed at. We could presume, though, that their aim must have been one (or both) of two general objectives - providing information to their fellow students, or providing feedback to the section faculty.

The disposition of the evaluation, as well as its tone and content, tend to suggest that the purpose was the former. Wheeler and Serota left the document

with Peter Messeri, chairman of the Student Committee on Educational Policy, with instructions to give it as wide a circulation as possible. The wording of the document ("Anyone caught in one of Mr. Koenig's 21.05 sections had better get out fast." "A favorite among Wellesley students, his classes sometimes turn into dating bars.") could hardly have been calculated to provide useful information for a section head organizing an undergraduate program.

How valuable are these guides for students? They aren't very helpful, because most undergraduates will rely on other sources of information. History majors, for example, most likely know enough students or faculty in their section to be able to assemble their own evaluation, from personal sources they have confidence in, of prospective courses. Non-history majors taking the subjects as electives are similarly likely to have their own contacts, with professors or friends, that will provide them with whatever information they need.

A guide presentation, then, isn't much of a positive contribution, and the reaction of a professor from the mathematics department underlines the possible negative effects. Such a review is likely to be

subjective (how could you summarize twenty different opinions objectively, without resorting to a multiple-choicequestion type of survey?) and personal, and the natural human response from a badmouthed professor would be to ignore such "advice" and perhaps pay even less attention to his teaching.

Students putting energy into evaluating their professors are better off moving in the other direction - providing feedback to their professors and, more important, their departmental chairman. Most departments are woefully short of feedback from their students, and this void is one of the more powerful factors contributing to the position of undergraduate education here.

The phenomenon of student apathy toward the education they pay so much money for may be due in part to the heavy workload on most undergraduates. Or perhaps the school's pre-occupation with research is so obvious to students that they judge concern about their education to be not worth the effort. Another explanation may be simple ignorance of the needs and possibilities.

Feedback - and, eventually, pressure - to the departments is a natural role for student honoraries and professional societies. Indeed, within some departments such action is already being taken. Phi Lambda Upsilon, the chemistry honorary. has produced a report, complete with suggested improvements, of that course's notorious lab sequence. Eta Kappa Nu, the electrical engineering honorary, is in the midst of an evaluation experiment covering that department's undergraduate program. A few other departments have more informal contact between faculty and undergraduates, but the total is hard-

For active student groups on the departmental level, evaluation could take the form of reviews of both course programs and the faculty themselves. Some degree programs, upon examination, may be deemed too restrictive, the required course of study too inflexible for students preparing for a world in which the specialist is gradually vanishing. Maybe students would like to see their departments recognize that undergraduates, while majoring in the same field, may have widely different plans for what they do with their discipline after they leave MIT. On the practical level this could mean the thinning out (or elimination) of the list of required courses, with a simultaneous increase in the reliance on counseling contact between faculty and

Returning to our original take-off point, the evaluation of faculty, student honoraries or professional societies must insist that their opinions on the department's faculty be taken into account. Every year tenure decisions shape the character of the faculty; students should meet with departmental chairmen to discuss current priorities for promoting faculty and allocating funds. Student societies should reach as many veterans of their department's courses as possible to provide a wide range of inputs. And it wouldn't be particularly useful to summarize a dozen or more opinions in a single paragraph: better to present the department with a number of complete. objective evaluations.

There is no being certain, of course, that the students will not be ignored. But at least the department officers will not be able to throw up their hands in despair over the lack of "student input."

- Potential authors and composers for TECH SHOW '72, and everyone else interested in learning more about TECH SHOW, are invited to an informal meeting on Thursday, Nov. 4, at 7:30 pm in the Kresge Little Theatre. Proposed scenarios will be due early in December. If you cannot attend the meeting, get in touch with Jeffrey Meldman (x2871) or Professor Gurney (x2644) for more information.
- "Which direction for the antiwar movement?" a discussion of perspectives for the antiwar movement by representatives of the two major national antiwar coalitions: the National Peace Action Coalition and the People's Coalition for Peace and Justice. Tonight (Fri.), 8 pm, 295 Huntington Ave., Boston, Room 307.
- Nathaniel Branden, Executive Director of the Institute of Biocentric Psychology, will speak on "Romantic Love: Neurosis or Rational Ideal?" in Kresge Aud. on Thurs., Nov. 4 at 8:15 pm. Sponsored by LSC; admission free.
- Lecture Series Committee will present SCHOOL DAZE, a talk on the state of college humor by Doug Kenney, editor of National Lampoon magazine, on Mon., Nov. 1 at 4:15 pm in 26-100. Admission free.
- Phi Kappa Sigma, 530 Beacon St., Boston, is sponsoring its bi-annual free beer party, Skuffle, on Saturday, Oct. 30. The party is open to all members of the MIT and Wellesley communities. FREE. Couples only. Infinitely informal.
- Ukranian students, new and old, are invited to meet other Ukranian students in the Boston area. Call Alex or Chrys. 491-1390, for information.
- The Student Financial Aid Office notes that a local scholarship fund is soliciting applications from Armenian-American freshman students, born in the US and residing in Mass. If you think you fill this bill and care to apply, notify Mrs. Bowe in the Student Financial Aid Office (x4791) by Oct. 31.
- If you are a male or female between 16 and 100 years old and would like to volunteer three hours of your time each week by offering your friendship to boys 6-18 years old, or if you have any hobby or interest that you would like to share with boys, then please call Jack Cascio at 268-4301 or 268-2534.

The IAP Planning Committee has \$10,000 to help support IAP activities with unusual educational promise.

Letters of application should be submitted to the IAP Planning Office as soon as possible (Rm. 5-207). We expect that all awards will be made by December 3. Decisions on awards will be made by an ad hoc committee of faculty and students chosen from the IAP Policy Committee and the SCEP IAP Task Force.

The letter of application should include a brief and specific description of the proposed activity, the names o involved, if any, and a reasonably detailed budget. Any individual student, faculty member or group may apply, including groups formed specifically for an IAP activity.

Requests will be judged by the Committee on the basis of independence, originality and creativity. Priority will be given to activities less likely to take place during the regular school semester, and to activities that depend heavily on student initiative.

The Committee is prepared to consider awards of up to \$500 or more if proposals suitable for such a large share of the total funds are received. For these larger grants, priority will be given to projects that benefit more than just a few people. Most other awards will be for projects of \$200 or less.

The Committee has agreed in advance to decline to support certain types of expenditures. For example, travel expenses and living costs will not be allowed for individuals engaged in an activity away from MIT. However, costs of organizing or otherwise implementing a project away from MIT are not ruled out.

For further information, write or call the IAP Planning Office, Rm. 5-207, ext. 1973.

Letters on evaluations

history and those who simply wish to get through the humanities requirement as easily and quickly as possible. Perhaps there are also other personal preferences that influence evaluation. For instance, I feel that I generally learn more from listening to an instructor that really knows his subject and has something interesting to say, than from a lot of wide-ranging student discussion. Thus, I prefer a lecture format which includes discussion when it arises naturally, as in the way Prof. MacMaster and Prof. Raiston handle their classes, rather than an outright encouragement of student discussion for its own sake that some other instructors and students prefer.

I rather suspect that another and very serious problem might arise from an evaluator trying to extract from completed questionnaires a profile of an instructor that he has never had. Under such circumstances weighing and sorting the various comments intelligently is virtually impossible and a highly distored

picture can emerge.

In conclusion I would suggest that in general student feedback should be confined-to just that, feedback, or if it is presented to other students, that it should be more carefully done. The descriptions should attempt to be more objective, to recognize that various students have various tastes in teaching techniques, and to include the strong and weak points of each professor, rather than trying to give an all over evaluation, or even worse trying to rate them in relation to others. I suspect that the compilers of this evaluation were too worried about appearing wishy-washy or making up just the right witty phrase about each instructor, and too little concerned with capturing the subtle and very complex attributes that make their teaching good or bad for various students.

I am haunted, in thinking about this, by the idea that, had this evaluation appeared earlier, I might have missed a couple of what I consider to be extremely good history courses of Prof. MacMaster's on the basis of five sentences of not very

well thought out, exaggerated criticism and not very interesting witticism in the midst of 35 column inches which tries to cover the whole history section. Surely, at the very least, this is the kind of thing that does not lend itself to compression into the size of a newspaper article.

I would urge anyone thinking of taking a history course, to visit the instructor in question and talk to him for a few minutes rather than be guided by these evaluations.

Dick Fletcher, '72

Altogether The Tech received five letters from students defending Prof. Mac-Master. -Ed.

To the Editor:

I wonder if Messrs. Serota and Wheeler might give readers a short summary of the content of the questionnaire used in the teacher-evaluation survey (The Tech October 22). Surveys run by students (or by others) sometimes have questionable value, and it would help, I think, if readers were told what the survey really tried to find out. How many students, for example, recommended or did not recommend the different professors? Were faculty members consulted during the evaluation? What difference is there between a "recommended" professor and a "highly recommended" one? Shouldn't there be a group of "so-so" instructors who, though not recommended, might be worth having if the student were interested in the subject he taught?

From looking at the results of this survey, I would guess that it did not get replies from more than a few hundred students. There are over three thousand undergraduates at MIT, and it seems likely that all of them have had or will have at least one of the sixteen professors evaluated in the report. What efforts were made to get a wide response? The survey can't have much value if only a small number of students took part in it.

Steve Gilbert

Tues. Nov. 2: SATYRICON by Weds. Oct. 27 - Tues. Nov. 2: THE MARX ellini, 4, 8:30; TOBY DAMMIT (Never Bet BROTHERS in A NIGHT AT THE OPERA, 4, he Devil Your Head) by Fellini, with Terrence 7:35, 11:10; A DAY AT THE RACES, 5:40, tamp, 6:10, 10:40; THE TENTH VICTIM, 9:15.

6:55, 11:25-exc. Fri. Sat. by Elio Petri, with Mastrojanni, Elsa Martinelli, Ursula Andress.

Beginning Weds. Nov. 3 - ARTHUR PENN ZLE OF A DOWNFALL CHILD with Faye Nov. Weds., Thurs. Nov., 3, 4, MICKEY Dunaway, 4, 7:20, 10:40-exc. Fri. & Sat. "One LE WORKER, Anne Bancroft, Patty Duke, "for everyone involved" Rolling Stone.

NDERGROUND FILM ORGANIZATION resents NINE films from the new visionary ACT OF THE HEART, 5:50, 9:10, by Paul inema including works by Whitney, Chris Almond, with Genevieve Bujold "a personal farker, Borowozyk. FRIDAY/SATURDAY statement that hovers between brilliance and october 29, 30, 11:45 pm, Tickets \$1.50.

1001 MASS. AVE. CAMBRIDGE - 868-3600 TICKETS \$2 DISCOUNT TICKET BOOKS 7 tickets - \$10 20 tickets - \$20

WIN in CAMBRIDGE

CAMBRIDGE CIVIC ASSOCIATION Endorsed Candidates - 1971

mark your ballot 1, 2, 3, 4, 5, 6,

7, 8, 9, 10, 11, 12

City Council

School Committee

Vote All 12 in order of your chi	Vote All 6 in order of your choice		
Barbara Ackermann	Robert P. Moncreiff	Ethel Caragianes	
Michael J. Amato □	Henry F. Owens, 3rd	Eric Davin 🗆	
Frederick S. Arsenault \Box	Thomas P. Rossi	Peter G. Gesell	
Jerry R. Cole □	Philip S. Shaw	Louis F. O'Malley	
Francis H. Duehay	Henry Smilowitz	Charles M. Pierce	
Saundra Graham □	C. Wendell Smith	David Wylie	

paid political announcement, CCA 2 Essex Street, Cambridge 02139, 876-9176

Cantabrigian's guide to next week's elections

Cambridge has a weird system of city government, probably unlike that of any other city in the country. It combines "Plan E" - most officials appointed by a city manager who is chosen by the city council - and 'PR" - the proportional representation system of voting for council and school board members (see box elsewhere on page).

Plan E is supposed to eliminate patronage and corruption by putting jobs into the hands of an independent city manager, whom councilors are forbidden by law to try to influence; the mayor supposedly becomes a mere figurehead elected by the city council from among its members. Today patronage is still rife, however, and the law goes unheeded.

PR is supposed to discourage personal attacks in campaigning (it might lose nth place votes), and give interest groups the chance to elect their own representatives. But today only the most powerful groups are represented on the council at all, and attempts at coalition campaigning are severely hampered. Furthermore, the campaign generates so little heat that politicians are elected year after year to play their games in relative obscurity (relative to Boston, say, or Somerville, a neighboring town of about equal population which has been buffeted by scandals this year).

The upshot is that while Boston's mayoral election has kept local dailies busy for months, it's all an interested Cambridge voter can do to find out the barest facts about even half the 36 council candidates and 21 school board candidates. (The multiplicity of candidates - there is no primary - itself discourages city-wide issue-oriented campaigns, strengthening local candidates who win votes through patronage.)

Living in Cambridge are over 2000 MIT employees, faculty, graduate students and staff, nearly enough to elect one councilor. How many of them have registered is anyone's guess, but chances are there are at least a thousand voters who work at MIT in some capacity. (For the most part, undergraduates have been unable to register.)

Since the race has attracted such scant and haphazard attention from the media, we present here a brief summary of the contestants and the campaign. We do not

have the manpower to research something of this size by ourselves from scratch; we have relied on campaign materials, and on evaluations printed in the Newsletter of the Cambridge Tenants' Organizing Committee and the Phoenix.

The Tech, as a non-profit educational organization, does not endorse particular candidatés.

Issues

There is only one matter which comes even close to a clear-cut campaign issue this year: the incumbent city council's firing of the city manager, and his replacement by a faithful city bureaucrat, John Corcoran. Only five councilors voted for Corcoran, and one is not running for reelection (the others are Coates, Danehy, Clinton and Vellucci).

Cambridge's rent control administrator is appointed by the city manager, so the city manager issue is also a rent control issue. The rent control law itself is not a matter of contention - it has too many supporters to be voted out - but it leaves great leeway in its enforcement.

Endorsements

Several local organizations support states of candidates; these endorsements are indicated after the candidates' names, as follows:

CCA: Cambridge Civic Association, the local "good government" organization. It pledges to support "rent control, community control, crime control" and make them work; it favors replacement of Corcoran with a professional city manager. CCA supports 12 candidates, three more than the number to be elected, but equal to the maximum number a person can vote for under the PR system.

The five: five of the CCA endorsees are running as a distinct slate, with a somewhat more radical program including stricter control of rent and housing, redistribution of taxation, and a new post of police commissioner outside of civil service.

Rep.: Cambridge Republican City Committee.

SWP: Socialist Workers' Party. This slate of four is the only one which runs entirely as a unit. For their platform see Jean Lafferty, et al., below.

The candidates

BARBARA ACKERMANN Sincumbent) (CCA) - impeccable liberal credentials; she is often isolated on the left wing of city council. Proponent of rent control, antiwar legislation and public transit, opposed highway extension into Cambridge.

MIKE AMATO (CCA) - active in community groups, including Riverside Neighborhood Assoc., ABCD, Cambridge Housing Convention; currently directs community mental health clinic. Would consolidate housing and redevelopment authorities, eliminating patronage, and advocates new rent control ordinance with teeth and a new administrator. On the other hand he lead SOC'M campaign to save former city manager Jim Sullivan who opposed rent control in any form. FRED ARSENAULT (CCA) - father of ten, 18 year resident of public housing, owner of a trucking-disposal company. Worked with CEOC, Cambridge Community Services, Teenage Drop-in Centers, and chaired Community Schools Commission. Would replace city manager, rent control administration and CHA.

JERRY COLE (CCA) - Past executive director of CCA, former Cambridge chairman of ADA, dropout of Harvard and Air Force Academy. An individualist liberal of no definite ideological stripe, he would bring in competent city manager, professionalize police and, through economic incentives, attract industry to broaden city tax base and get universities to build housing outside city. Dislikes "transient youth."

FRANCIS DUEHAY (CCA) (Rep) --Harvard School of Education Dean and 8-year member of School Committee. Active in SOC'M. Wants more and better public housing, effective police management and recruiting, university help on housing and "proper administration of

rent control." Supports right of students to vote where they live.

SAUNDRA GRAHAM (CCA) (the 5) a record of competent community work within traditional political forms and organizations. A fiery black, president of the Riverside-Cambridgeport Community Corporation, a director of the Cambridge Community Center, and a council member of the Houghton-King Community School. A fine orator and skilled negotiator, she stands for more low-income housing, tough rent control, a halt to university expansion and better police. Her militancy is displayed in deed as well as word: she has personally helped blocked evictions.

JEANNE LAFFERTY MILES, TOBA SINGER, SARAH ULL-MAN (SWP) - Socialist Workers' comprehensive platform includes demands to end rent increases and roll rents back to 1960 levels, end evictions, tenant control of rent commissions and public disclosure of landlords' financial records, and tenant management with all profits to be returned to tenants for housing improvements. Saundra Graham's platform echoes several of these points; both the SWP slate and Graham have received "critical support" from the radical Cambridge Tenants Organizing Committee. The weakenss of the SWP state are the members' lack of actual experience in Cambridge affairs (excepting Sarah Ullman).

ROBERT MONCRIEFF (incumbent) (CCA) (Rep) - member of a high-priced Boston law firm. Opposes rent control initiative, would hire a new rent control administrator and give the present system a chance to work. He pledges to replace city manager and "government by cabal" at City Hall with respect for citizen

participation.

STEVE NELSON - most individualistic of the candidates, Nelson is a Harvard Law graduate who managed the old Boston Tea Party. Ran for city council in 1969 and lost. Has since published a book of poems with Jan Lewis which they distributed themselves. Advocates: legalized marijuana with tax, a graduated property tax, four day work week for city employees, collective bargaining between tenant unions and landlords. During '69 campaign, however, he talked of an alliance with Harvard Square businessmen. He also opposed votes for students in belief that Cambridge belongs to long-term residents, Such idiosyncratic stands have alienated him from virtually every political bloc in the city, left of right.

HENRY OWENS (CCA) (Rep) lifelong Cambridge resident, son of a millionaire trucking magnate, former assistant DA of Middlesex County counsel for the Boston NAACP, and director of the Harvard-Radcliffe Afra American Cultural Center, Black Com munity Fund, and Cambridge YMCA Supporters view him as logical replace ment for black incumbent Tom Coates Advocates nationwide search for new city manager, opposes Harvard expansion into Riverside, and shoddy housing for low income tenants (a la Rindge Rowers).

TOM ROSSI (CCA) (the 5) - recent Harvard grad and resident of Jackson Gardens project, past drug counselor at Project Place. Youngest of the 5 slate, his experience is limited but his knowledge of the city extensive.

PHIL SHAW (CCA) (the 5) - lawyer and musician, a key member of the liberal Citizens for Participation Politics, and organizer for Tenants' Assistance Project (TAP). Formerly with CTOC, he broke with that group early this year on grounds that CTOC's radicalism might turn off people he wanted to reach. Shaw advocates stringent rent control and helped organize Northgate and Rindge Towers tenants to fight rent increases,

HENRY SMILOWITZ (CCA) (the 5) MIT grad student in biology, the only student in the race. Helped start the Hancock Street Food Coop. No expenence in Cambridge city politics (but is that a failing?). Concerned with effective rent' control, establishment of food coops, curtailing university expansion, establishment of day care centers associated with housing for elderly.

WENDELL SMITH (CCA) (the 5) ~ editor of the Phoenix's Graffitti, a community bulletin board, and a tenant in Cambridge. One of the founders of The Proposition, Cambridge's longest running satirical review. No experience as a politician, but his work as a journalist. leaves him with overview of almost every community project ever conceived, tried or implemented in the Boston area.

OTHER INCUMBENTS - Daniel Clinton, Tom Coates, Thomas Danely, Walter Sullivan and Al Vellucci are veteran local politicians who have a good chance of reelection. All have friends or relatives scattered throughout the city government, and none are reformers in any sense. (Also in this class, but not yet a councilor, is William Walsh, an attorney representing numerous Cambridge land

School Committee

The six school committee members are surrounded by an even greater cloud of obscurity than the city council, yet the schools are one of the city's most important institutions and one of its greatest sources of patronage.

The campaign situation is similar to the council's. Here, it is the appointment of school commissioner Frank Frisoli, a local teacher, over several qualified professionals which is the greatest matter of contention. A short summary:

Incumbents supporting Frisoli: Donald Fantini, James Fitzgerald, Joseph May

CCA endorsees: Ethel Caragianes, End Davin, Peter Gesell, Louis O'Malley, Charles Pierce, David Wylie.

Republican City Committee endorsees: Caragianes, Gesell, Glen Koocher, Charles Pierce.

Referendums

Residents will also vote on whether it should be the policy of the city to provide 24-hour free day care, and whether to legalize beano. Each question requires a majority of votes, and i minimum of one-third of the number of registered voters (about 15,000), to pass.

> Compiled by Robert Fourt and Bruce Schwarts

Hungry?

Read about the Institute's two least-praised sources of food - commons and Servend - in The Tech next week.

How to vote with PR

In a PR election you may vote for as many candidates as you wish (though your ballot will ultimately count for only one candidate), but' you must vote with numbers (1, 2, 3, etc.) in the order of your preference. X's make the ballot invalid.

Proportional representation gets its name because a candidate needs to receive only a fraction of the total ballots to win. Because there are nine council seats, the fraction needed to be elected (called "quota") is one-tenth of the valid ballots plus 1. In 1969 there were 25,613 ballots cast, of which 631 were initially invalid. One-tenth of the valid ballots (24,982) plus 1 is 2,499.

The count begins with the separation of the ballots among candidates by the first preference shown - the No. 1 vote. Any candidate who reaches quota in No. 1 votes is declared elected. In 1969 only Walter Sullivan accomplished this. Sullivan actually had 3,617 No. 1 votes, or 1,118 more than quota. His excess ballots were redistributed among the other candidates in accordance with the next preference shown on each ballot (No. 2 vote).

The count now continues with the elimination of the candidate with the fewest ballots. At this stage in 1969, Cleveland (30 votes), Gill (40 votes) and Ullman (20 votes) were lumped

together and eliminated (3rd Count). Then Usmari (71 votes - 4th Count), then Shea (75 votes - 5th Count), and so on. The ballots of these candidates are redistributed among the other candidates in accordance with the nextpreference shown. After each redistribution, the candidate with the then lowest number of votes is eliminated and his ballots are redistributed. As surviving candidates reach quota through the addition of transferred ballots to their totals, they are declared elected and no further ballots are transferred to them. This process continues until all but nine candidates have been eliminated.

Especially in the later stages of the count, many ballots of losing candidates cannot be transferred because they show votes only for candidates who have already been eliminated on who have reached quota. These "exhausted" ballots do not count for anyone. Obviously the more candidates you vote for, the less chance that your ballot will become exhausted.

Note the crucial importance of the No. 1 vote. All ballots on which the No. 1 vote is for a winning candidate never help another candidate (except in the rare case where the winning candidate receives more than quota on the first count). In 1969, 17,092 ballots, or about 68% of the total, counted for the No. 1 candidate.

Where to vote

Polls will be open 8 am through 8 pm on election day, next Tuesday, November 2.

Your polling place is determined by the ward you live in; a complete list appears in the Cambridge Chronicle. If you are not sure where to vote, call the Cambridge Election Commission, 876-9828.

BLOOD DRIVE

SALA de PUERTO RICO

NOV. 8-12, 1971 x 7911

Make an appointment today

1971 MIT RED CROSS FALL BLOOD DRIVE

Nov. 8-12, 1971

TECHNOLOGY COMMUNITY ASSOCIA
W20-450

	-		
Mr. Mrs. Miss			-
Blood type:			
Institute Address			Dept:
Institute Phones: Ext:	Dorm Line:	Other:	
Local Residence:			
Social Security Number (Student use MII ID	Male O M	Female O F
Please indicate your sex:		Graduate O G	Under Grad D \$
MIT students please indic Non-student MIT common			D C
If this will be your first d		k here	0 D
If this is your first donat			ОТ
If you have donated before			······································
Please give your birth da			(month-day-year)
			-
DIRECTIONS:	•		
Fill out this form comp	eletely, giving all the come in to donate	requested informate. On the right ha	ation. This will nd side of this

form, please indicate by checking or marking boxes on the grid provided, the times which you can be scheduled to donate (please allow at least 65 minutes for the entire process); OR if you can donate at any time, please

Return this form to your solicitor or to TCA, W20-450, as soon as possible. You will be sent a card in the mail notifying you of your scheduled appointment time. For your convenience, just fold this form on the dotted

If you have no appointment preference at all, please check here .

line, staple, and drop it into any MIT Institute mailbox. Thank you.

mark the box below:

	Mon 11/8	Tues 11/9		Thur 11/11	Fri 11/12
9:45	101	201	301	401	501
10:03	102	202	302	402	502
10:15	103	203	303	403	503
10:30	104	204	304	404	504
10:45	105	205	305	405	505
11:00	106	206	306	406	506
11:15	107	207	307	407	507
11:30	108	208	308	¥408	508
11:45	109	209	309	409	509
12:00	110	210	310	410	510
12:15	111	211	311	411	511
12:30	112	212	312	412	512
12:45	113	213	313	413	513
1:00	114	214	314	414	514
1:15	115	215	315	415	515
1:30	116	216	316	416	516
1:45	117	217	317	417	517
2:00	118	218	318	418	518
2:15	119	219	319	419	519
2:30	120	220	320	420	520
2:45	121	221	321	421	521
3:00	122	222	322	422	522
3:15	123	223	323	423	523
3:30	124	224	324	424	524

Lettvin: "The comprehensive involvented in the comprehensive involvented in the comprehensive in the comprehensive

By Jerome Y. Lettvin

Prof. Lettvin presented this paper at a UNESCO symposium on Culture and Science: The Diversity of Cultures as against the Universality of Science and Technology, in Paris on last September 6.

Copyright 1971, UNESCO

The comprehensive involvement of man in science is now fatal. There are two distinct meanings to the word science. The first meaning is what physicists and mathematicians do. The second meaning is a magical art, about which the general public has superstition. These views are related to each other as basic theology and priestled religion in the middle ages. Politically it is the latter that is most useful. But just as one cannot divorce the deeds and policies of the Inquisition from the doctrines and propositions of the saints, so now one cannot really separate the tyrannies of government from the theories of scholars. That connexion occurs now as then through the schools in which vulgar opinion entrains the disciplines and expediency reshapes the work.

This vulgar opinion, this second and now overriding view of science, deserves a brief description. To it science consists of facts and artifacts - actuarial tables on the one hand, lasers on the other. Theory is a kind of incantation that ensures the fact and makes the artifact work. Advertising agencies, when they want to show that some breakfast cereal, degraded from cardboard wastes, is scientifically designed, put $E = mc^2$ conspicuously in the picture. Equal nonsense occurs in other contexts in other countries. By itself such gimmickry is no more harm than a St. Christopher medal. What is of harm is the blind faith in an imposed system that is implied. "Science says" has replaced "scripture tells us" but with no more critical reflection on the one than on the other. Scripture once told us through the voice of authority that we should not suffer witches to live, that slaves are legitimately taken, that to be poor is to be virtuous and, by this dreadful twisting, was the instrument of oppression through much of our history in Europe and America. Science now says that Vietnamese peasants do not have the proper infrastructure to maintain a progressive and democratic economy, that blacks cannot reason as well as whites and that to be selfish is to be sane.

Once formal religion held temporal authority on a promise of heaven, astonished the people with miracles long past, and sold them futures in remitted pain for today's bread. It is replaced by the new faith whose living figures ascend to the heavens, whose miracles are offered in the immediate, and which gives electric bread-knives as souvenirs. Most wonderful of all it is not prayer but reason that distributes this bounty. Man was God all the time. But reason is no more understandable this year than prayer a thousand years ago. Little Billy may become a scientist as earlier he might have turned priest, and know the sacred texts, making of his experiments prayers. The chromed apparatus is blessed by distant authority, the water thrice-filtered for purity, and he wears the white antiseptic gown we all known from TV commercials. But the masses still move by faith. And the cynical educators translate, like St. Jerome, sacred words into the administrator's language, hold press conferences on the latest wonders, and display in picture magazines. Broadcast is important not because it explains but because daily life has been conditioned to depend on a faith that can move mountains.

Like the religion it supplants, this new one must have its messiah who cannot be the divine substance itself, the propositions of science, nor yet the mortal gadgets it creates. So now, conceived without error, got almost wholly at cost, delivered in a bedlam over new stars in the east, and amortized on Caesar's due, comes the son of man, taking our labors on his console. Neither human nor divine, neither suffering nor transcending - here he is, here at the telephone, a finger-tip away - not on a low hill elsewhere and long ago, but here to be touched, questioned, heard, here to reveal that disinterested justice no mortal man could even attain. And he is promised to stay -

world without end.

I have fear of what science says, not the science that is hard-won knowledge but that other science, the faith imposed on people by a self-elected administrating priethood. The most vicious thing that this public science says, the supporting lie on which revolutionary and reactionary alike agree, is that truth is in number, numbers are in machines, machines are not human and therefore just. They are spared the original sin. In the hands of an unscrupulous and power-grasping priest-hood, this efficient tool, just as earlier, the Final Man, has become an instrument of bondage.

In spite of great differences in economic and social structure, the Western World now resembles the Western World of the sixth century. A metaphysics that ushered in the first dark ages is again flourishing. I call it Antaeism after that unhappy giant that Hercules killed by keeping him from touching the earth. Antaeism is an overwhelming abandonment of the phenomenal world as the source of knowledge.

Without denying other kinds of analysis, let us look back to the middle of the first millenium with this syndrome in mind. The world then, as now, had become crowded, not for lack of land and resources, but for lack of ways to use them. Ethics and politics, the way men treat each other, had become a major preoccupation, and control of man insensibly became more important than control of nature. In the schools Greek was dropped as a dead language and mathematics decayed as a useless discipline. Natural sciences turned from description to a ruminative scholarship concerned with authority. An almost sensuous Hippocratic immersion in observation of the patient gave way to the rationalist system of Galen whose style has reappeared in medical textbooks. Causes, broad enough in concept as to admit of no exceptions, gave a world of only accidentally modified effects. It did not matter, from the public and uninitiated view, that this system of reason was not truly productive, that mechanism was not truly explained by indwelling properties, that, indeed, an institution had grown powerful enough to fulfil its own prophecies. For the overwhelming daily problem that shadowed the sun by day and obscured the stars at night was how to live in a world more constrained by one's fellows than by any of the forces offered by nature. Then as now, manipulators appeared and kept shop everywhere, then as priests, now as social scientists, arrogating control by an alleged divine order whose shibboleths are parodies of serious thought, but always such as hold men down. It mattered little to organized and organizing religion then as to the social sciences now what the nature is of the single man, and the models of the "good man" offered by heretic and patriarch alike are as astonishing and foolish as the "economic man" of several decades ago or the interactive operator of today.

Nevertheless today seems, at first glance, very different. Control of nature has not been abandoned, rather is more violently and successfully pursued than ever in history. Indeed we seem almost at another extreme - allowing ethics and politics to lapse or be subverted to a progress manifest in consumer goods. But this first glance is superficial. When we penetrate the arts and sciences themselves we find a strange picture. With the sole exception of the physical sciences, including chemistry, a new style is ascendant, appearing in the arts as non-subjectivism, in the sciences as a mixture of positivism and operationalism. The foreseen accident of the computer, like the prophesied accident of Christ, has engendered a new mode of thought. Where Stoic and Talmudic rationalism shaped then fused with and finally disappeared into the figure of Jesus, so now technologic rationalism has constructed and is being embodied by the computer. Two metaphysical changes are already spreading rapidly; first, the denial of or indifference to generative law as distinct from convenient algorithm; second, the frank substitution of data for phenomena, in engineering and biology and medicine, and almost overwhelmingly

in social science. These changes are also central to the new religion.

In modelling the world one used to assume that laws are simple but hard to find. Parsimony and symmetry played the greatest part in setting up science as we know it. Had Newton's equations of motion been as long as the Principia itself, and proven, somehow, in an appendix to be necessarily that long, they would not have been so interesting even if they were true. Beauty lay in the economy, for the ideas were not only easy to grasp, but universally applicable like quotations from Shakespeare. The laws found were necessary in the sense that the whole world, the very heavens, bore witness to them. But one can reasonably ask: Is this aesthetic required to make working models of the world? Suppose instead of having a small set of lucid equations, one had an enormous set of measurements independently taken and covering most practical cases. Then suppose one had an immense machine of great storage capacity and high operating speed, and could show that for shooting cannon, computing freight costs and calculating orbits it was almost always a matter of practical indifference whether he used Newton's system or the huge set of seperate expressions. Would there be any practical reason for preferring Newton except by the superstition of taste?

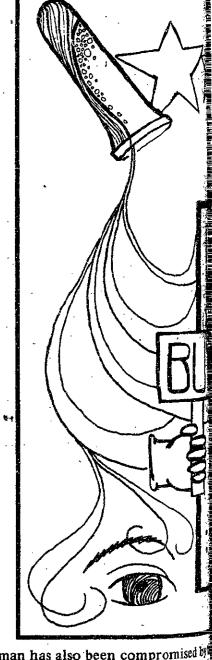
What has just been given in travesty for physics can be taken as directly applicable in many other sciences. Computers have vastly increased our ability to work with data points. It is possible, for example, to patch together weather prediction, or the location of oil deposits, or putting a man on the moon, because the dogwork of patching data can be done easily and rapidly by machine. Where a clearly determined human goal can inform a human judge, to reorganize computation, patching becomes a fine art, the blending of apparently irrelevant procedures to produce wanted results. However, the patchwork is not usually a theory in any classical sense. It is prescriptive like a good recipe. But, when the same algorithms and programs, so successful in directed engineering, are used in cases where there is neither a theory to be checked nor a goal to be approached, the system turns bizarre, a thing out of Jonathan Swift. Then the output of the machine, whatever it is, can become the goal, the program become the theory, as you can actually see occurring in certain branches of biophysics. What first occasions the work disappears and the real objects of discourse are revealed as the workings of the machine.

It is more in technology than in science that the computing machines flourish. Not only in automatic bookkeeping and traffic control of rolling stock but also in the design of special devices, useful circuits, optimal ways of construcing apparatus, these computers are without peer. One experiences almost a frisson of awe when watching an automated draftsman lay out a set of complex plans, or an automated milling machine shape to perfection a piece of metal, or an automated editor justify the lines on a page and even proofread. So much of what we formerly thought to be talents and crafts turn out to be tedious exercise; so much labor, in retrospect, is slavery rather than work. And since the fruits of science are the gadgets and comforts now better made as well as better designed by machine, it is not unreasonable to imagine that science itself is of the same nature. From the popular view science becomes what computers handle - sets of numbers, preferably large, as in Isaac Asimov's explanations of cosmology. Thus the fusion of the science qua relagion and science qua discipline is already occur-

The universe, received as a large set of clever tricks, leads to a disengagement from it, makes it about as worthy of notice as a new car. This attitude is reinforced by a technology that has almost exclusive dominion over what we see. The ambient world now presented to the eyes of a city child is more the piling up of clever tricks than an orchestration of natural process. The stage is set for the flourishing of Antaeism. Taken without aesthetic, as a list of independent

measures rather than chains of forms, correlated rather than governed macroscopically by probable rather than necessity, the phenomenot different in substance from the different in principle one from the

Possibly our metaphysics could withstood the strain if only the page of man on man were somewhat len along with the methodical devaluate the world has come the pressure to how to deal with each other as men same expediency which destroyd schools in the early middle ages drives us again. And attention turns the whole of nature (as some explicable, given money enough time) to man himself. The acedia palls the schools in the United & comes only partly from their coma to an industry, or tissue cultura administrators. Most of my colleague also old prostitutes and we don't supporting outselves that way. Inde will continue to lie, cheat, embezzle pimp as is the custom, in order to a our laboratores going and out shie financed. Much more disheartenine find now in the clear eyes of students as in the bloodshot eyes @ administrators how the world changed from a great chain of being jig-saw puzzle, the connexions bela the parts arbitrary or conventional nature of the parts accidental or trived. Puzzles are, in the end, born it is that many young physicist chemists are turning to biology biologists are turning to medicing social science in one general compli to work with man himself. But them

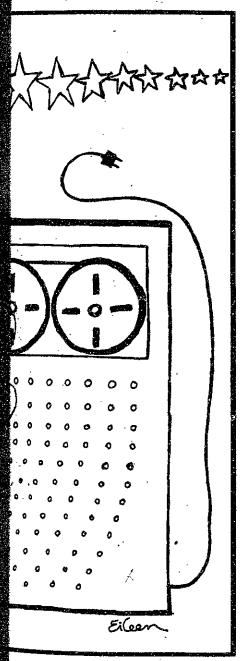


of man has also been compromised by spirit of the age, the same Antaeisn governs whatever science has no come theory. From the nature of psychological tests, from the results of brain still tion, from the discovery of "center" the brain (e.g. those for "pain" "pleasure"), from the attempt to the blind see by inserting a prima television set in the brain, from exp ments on social interaction in 🥞 groups, from the studies of learning children, in a word, from the whole contemporary psychology and so di brain sciences, the image of man is the a determined mosaic of stimulus-respons mechanisms, perhaps modified co gently, but still a clock-work that call disassembled. Epistemology has become dirty word. In this atmosphere computerniks rightly call the merely a meat machine. From this over-riding materially

ent of man in science is now fatal..."

inist point of view, wherein mental usation is ultimately described in terms a cartesian mechanics, the social ientist proceeds to handle groups of en. The partitioning of work even tries resemble what once happened in hysics. It is left to the psychologist to what are the eigen-characteristics of hat social particle, man, but the social ientist writes the thermodynamics of e masses, defines social heat, social der, social equilibrium, etc. In his there man is a bundle of properties that an be abstracted only from the aggreate. As temperature has no meaning for he single particle, so do his group vnamics have no counterpart in the dividual. Older theories like the triparte soul of Plato, invested by Freud, took ciety and the individual as mirrors of ach other, but such an idealist bias prrupts the collection of data, and so is

Here is our new priest-ling, despised by he theologian, the proper scientist, but eard in the parishes to which high earning never penetrates and it is from im that the new church emanates rather han from learned arguments. Already his sceticism is wondrous — a mortification spirit in an air-conditioned desert here once the flesh wasted on the hotands of Libya. For he has denied himself Il those weaknesses that plague comhoner and professor alike, mercy, empaby understanding and, most important. fall, that generative property of mind, aste itself, to test his powers he will even ake compassion to discourse, as once the esert fathers took whores to bed, in rder to show his faith unmoved. In his ands, through a ritual he need not nderstand, by instruments he need not



now, a miracle occurs that transubstantites flesh to number. So are the Viet Nam easants pacified by the six-fold conneced society, plants shorn of their verdure then the threshold of hunger is calculaed. How many men can we lose, by urrent opinion in the middle west? How nany can they lose before the structure I their country submits to our will that given precisely by models that even enerals can grasp? An internally, how is issent distributed, what connects and asconnects political action, how is credit istributed among the poor? How is ntelligence related to class, how is class elated to education, how is education elated to profession, how is the hierrchy structured? What are the frames of eference from which the expendable hes hang as if on crosses? I do not need o give you specifics. You have read the ewspapers, the Pentagon papers, Noam homsky's dissection of the arrogance in

our social scientists turned to politics, the power behind the drone. But also you must read Professor Herrnstein's handling of the genetic inferiority of the lower classes, and Professor Jansen's discussion of the genetic inferiority of the black man, and the clever discovery of inherent inability to read in the American Indian, to realize the true power of endless number in the paper output, the interminable paper output that serves our Caesars. But do you think it is different in the Soviet Union, or France, or any_ other developed country? Of course, there are possibly some honest men in the field, as once there were honest monks, and they may even be in the majority for all I know or can read of what they issue, but I am not talking of them, rather their church, not of their beliefs, rather the public policies issued under their collective imprimature. Yet, in fairness to them, as to the natural scientist, one must show the problems they face.

There are so damned many men, and so many diverse aspects to them, that sooner or later the social observer must interpose between himself and his material a data-gathering and data-arranging device - a kind of shaped filter or Procrustean bed to isolate features of moment. Gathering his data by questionnaire rather than by discussions, so as to exclude bias, counting noses and words rather than taking meanings, so as to define a set, converting people to symbols and then draining the symbols of reference, the social scientist is now, like a mathematician, almost completely abstract, and able to handle social relations with divine disinterest.

But the immense ease with which the data can be shuffled by machine has seduced him. Model after model springs to mind before the huge ink-blot of correlation matrices. He must test them, cautiously, carefully. Since he is studying an interactive and sensitive system that is willing, almost eager to accommodate itself to any imposed constraints, that, in fact, has been evolved like some transcendental Geisha girl to be all things to all customers, he can only enter into a folie a deux, a mutual delusion, with the

society he studies.

Whatever he does to it will have an effect, and the effect will always be significant, must be significant, for his model. It is a triumph, elsewhere in science, to find a technique that is useful in confirming or denying what one proposes. It would be a triumph to find a social experiment without consequences to the ideas of the experimenter. Not even economics, that almost decent discipline, is exempt.

What the epiphany of the computer has done in the social sciences is to remove any tendency to an aesthetic, to a judgment by taste, as it has done for all other sciences not yet possessed of a firm central theory. It has substituted for understanding a patchwork of rules of thumb, often neither tested nor intelligible. On the superstition that reduction to number is the same as abstraction, it permits any arbitrary assemblage of data to be mined for relations that can then be named and reified in the same way as Fritz Mauthner once imagined that myths arise. Nor can the differences between other science and this sort of science be exposed from the outside - since the programs, subroutines, software and hardware cannot be distinguished between a problem in cosmology and the calculation of probable incidence of sexual aberrations in radical students.

I have gone into these matters to a tedious extent in order to prepare you for a glimpse of the saviour himself, as noble in concept as any modern enterprise, possibly the noblest of them all, but also the most vicious in effect. This king, this bright star in the diadem of our paper universe is a project called Artificial Intelligence. You have heard vague rumours of his coming, and there will be a point at which you will be told that he came but you were looking elsewhere.

The venture is to change machine from being sorcerer's apprentice to being itself the sorcerer. Again, as always, there are two aspects to the science. On the one hand there is the serious attempt first, to find what are the properties and limits of computers as they are now or can be shortly, and second, whether or not human perception and judgment have rules that can be formalized and so modelled on machines. These are complex and beautiful questions. On the other hand there is the public aspect that promises new hope for automatic babysitters, psychiatrists, and executives. Within any single project, whether at MIT or Stanford, Tokyo or Moscow, there are at the same time those who are concerned with theory and those who promise performance to the eagerly waiting government that waits on a new and powerful tool. From the government's point of view, I may add, it doesn't matter one bit whether or not the device can be used, for all that is required of it is proclaimed existence, the public belief in an inspired golem, for the government to let it be known it is in use. Wiener attributed too much integrity to our leaders in his warning on this subject his book, God and Golem.

The aim of those who promise performance can be given by a recentlyoccurring anecdote. You may have read that a Japanese consortium has convinced its government to invest many millions of dollars in an artificial intelligence. I suppose also that you know of recent Russian interest in the same topic. The leader of a major American computer project is trying to persuade the U.S. government also to invest heavily. For, this leader points out, the first machine devised that can proceed by itself will be given the task of designing a yet cleverer machine, and so on, until the third or fourth generation should be able to take over the world, and which do we as Americans want to have, their machine taking us over, or our machine defending us? I assume, by now, that most of you understand our euphemisms.

This is the sort of language that Caesar understands, and if anything characterizes the administrative algebraist, it is an extended low cunning. But you will note the administrative aims and weigh them against the search for pure knowledge on the part of those few scientists left who are interested in the computer as an object of study. The same unscrupulousness that has taken social science into applied social engineering and poisoned enduringly the field, is now used to develop a complement to the social engineer that makes the new church invincible. For it is that church and not the rulers it will appear to support, that becomes our ruling class, but now with a cap of invisibility or impenetrability.

I, in common with many other teachers, have already conceded defeat. It is not apocalypse that we cry but a dull death-watch that we hold. The spirit has already become uniformly Antaeic, and the vision is of a moribund world plucking at the coverlet and babbling of clear waters and green fields. Distant trees, blue skies, lassitude and anger, my hand and your body are truly, truly no more than appropriately long sets in a set-theoretically definable cosmos. It is not, sadly, what a programmer would call a neat universe, and the only frames of reference in sight seem to be gallows.

Since I have come to fear the administrative use of any experiment, good or bad, in the social and behavioral sciences, I spend my time with those jolly friars that tend the computer. The world, to them, is a system of propositions about elements that have, through human muddleheadedness, been improperly defined. When the definitions can be made precise then the propositions can be handled. One remembers Confucius and the rectification of names. They have finally found the solution to the mindbody problem – there is no mind. The computernik leans over his drink in debate - "Well then, define the mind. I will not permit you to use undefined words." Indeed, indeed. Why then let us define a man. There he is, a featherless biped with wide toenails to distinguish him from a plucked chicken. What in hell does he mean by defining, this jolly cleric? As if definition were applicable to phenomena at all, to a stone, a mote, a photon? But such is the gist of our foolish debates on thinking machines. And he has the advantage for he and I

both know that physiology and psychology are dead issues, that it is probably easier to build a brain than analyse it. By the time he is ready, man will be evolved to act like his models.

One week he calls me up. There is a program devised by Professor Weizenbaum and it is an automatic non-directive psychiatrist. I type in "I feel lousy" - it types back, "Why do you feel lousy?" - I type in "Because you are talking to me;" - and it types back, "Does it bother you that I am talking to you?" I type in "Yes" - and it types back "I understand." I?!!! Understand?!!! And does it also intone mea culpa, mea maxima culpa to a forgiving steam engine in some sacred round-house? I know Weizenbaum very well. I know he designed this program not for therapy but to show how little content there was in that therapeutic discipline. So I say this, and the computernik cries out "But you can tell it from the real therapist? Operationally is there a difference?" There really is none. And this is the way it goes. Ingenious solutions of technical problems, and heaps and heaps of clever tricks, because to this new religion that is what evolution is, a concatenation of clever tricks.

Weizenbaum meant a parody. But to the computerniks whatever utters "I" fulfills the Cartesian "cogito." In such such hands our lives become trash. "Love?" they say; "come back week after next. We have a contract this week to translate Sir John Suckling into Icelandic." But week after next a bug has showed up in the translating program. There is a regular museum of bugs by now — they are seeking a universal bug-killer, for all that stands between them and the final conquest of cognition are these few bugs.

Their attitude is infectious in spite of the barren-ness of results. One wanders around like a patient after shock treatment. The stars, so what; the war, so what; my friends are dying, so what; I don't feel anything, so what. Precisely here comes my revelation. For the world, decomposed by the antipoetic act can now be reassembled in a non-biodegradable way. Confronted by my own failure of nerve, by the senseless and brutal war in Viet Nam, the starving of Pakistani people with American cooperation, the daily tally of planned, annotated and correlated disaster I feel as if almost any universe were preferable, that the metamorphosis of the vampire cannot come soon enough.

And that is, I imagine, how it will appear to others. Sooner or later the promised delivery of a guaranteed thinker to advise our elect representatives will be replaced by the noise that he exists, the rumour that he had just passed a street away, the certainty that he now rules.

Here, then, is the new saviour. And do not imagine that his retinue is different from what it was for Another after His rumour was inscribed. Attending the chrome-plated tradition are some of the sickest enthusiasts since Saint Simeon Stylites, faceless, empty-eyed, cooperating in their anonymity on programs inscribed like palimsests on a poetry that no one understands anymore anyway. To them is the truth revealed, and in their numbers as in the prayers of the African fathers, all our liberties and lives, our sex and our science will become as dust, independent sense-data points.

Science says, and the poor will be marked unto the nth generation. Science says, and not a sparrow falls but the machine slaps it down and takes the identification number. Culture will be preserved in this apostolic empire, and will be displayed weekends on the walls of an IBM museum. Cultural imperialism? Nonsense. Our devices will bear the stamp of the country ordering them. Men will not be much changed in general. They will have achieved identify through indiscernability as was foretold. Yet, as in Chicago, they will dance Ukrainian dances at least once a week to remind them of their heritage. Our sales representatives, trained in your tribal taboos, will call on you shortly. You have no choice but to buy. For this is the new rationalism, the new messiah, the new church, and the new dark ages come upon

ARTS



Her doctor knows! Her priest knows!

Why can't she tell her husband?



X?...R?...Would you believe GP?

recording:

Sea Train

By Jay Pollack

Sea Train originally formed from the remains of the Blues Project after Al Kooper and Steve Katz left. There was little personnel change between Planned Obsolescence, by the Blues Project and the first, bad Sea Train album on A&M in 1968 (which even the group itself didn't like).

They didn't put out another record for two years until just about a year ago. They were beefed up by Peter Rowan of Earth Opera and George Martin, former producer of some other famous group. The first impression on listening to either Sea Train or Marblehead Messenger (both on Capitol) is that they are very professional and slick. And there is no doubt that they are. However, this tendency is counterbalanced by the presence of Richard Greene, fiddler extraordinaire.

The band provides a tight enough backup, but on the first album everyone except Greene seemed to be afraid of coming forward to take the lead. Thus, a lot of the time it seemed as if Greene had to carry the whole group, which he certainly could do well enough. But even though the group had plenty of bounce and plenty of fiddle, you knew

they could do better. It was certainly a respectable effort but you had the feeling that there was a tremendous record in this band somewhere. Marblehead Messenger is not that record but it is good enough to keep the feeling alive.

On Marblehead Messenger, there is less Greene and more of the others and it still sounds just as perky as before. Jim Robets has gotten rid of his artistic excesses as the lyricist which marred the first album slightly. Rowan and Lloyd Baskin are contributing more as songwriters and instrumentalists. And when Greene lets loose on the violin, he is just as good as he ever was.

The songs are a little more down to earth on this album. Jim Roberts has stopped trying to be the master poet and has gotten rid of some of the fancy language; it keeps the songs from sounding too flowery and genteel.

They are reputed to be even better live (where everyone can let go, supposedly), so maybe a live album could be released. Still, on record, Sea Train have plenty of steam left. Marblehead Messenger is enough to make us keep waiting for the next record for them to realize their potential.

film:

Politics and the rating game

By Emanuel Goldman

So, the weekend has finally come around, and you think, why not take in a movie? You've read your Vincent Canby, Richard Schickel, or your Joe Morgenstern, and you figure you pretty much know what's good and what isn't. But there may be one more piece of data you'd like to be sure about. Would it be appropriate for your teenage daughter? Maybe your spouse's stomach isn't too strong, or maybe he or she has a refined sense of taste? Or, maybe you're in the mood for some hardnosed, no holds barred adult entertainment? So, you look at the ratings and see either a G (general admission), GP (parental guidance suggested), R (under 17 with adult guardian only), or X (under 17 not admitted). That should answer the question, shouldn't it?

Wrong. After two years of reviewing films, I have come to the realization that the rating a film receives may have as much to do with the political content of the film as with the degree of sexually "objectional" material. Sure, there is a correlation to nudity and sexuality in the ratings, but even this is linked more to politics than morality. I don't believe it is deliberate on the part of the Motion Picture Association of America (MPAA). Rather, I suspect that their rating criteria are subconsciously. influenced by the political preoccupations of the country.

On what basis do I make these allegations? Consider the following examples: The Landlord and Pieces of Dreams are both rated R. They contain no nudity; however, they lean to the left, politically. The Landlord is sympathetic to interracial romance, and Pieces of Dreams is sympathetic to a priest who challenges the requirement of celibacy.

On the other hand, the following films contain varying degrees of nudity, and are rated GP: A Man Called Horse, Rider on the Rain, and Wedding Night. Although done with considerable finesse, the violent rape scene in Rider on the Rain is as potentially objectional to the sanctimonious as anything I have seen in X rated films. However, the hero of Rider is a U.S. army colonel, and the film doesn't even remotely broach anything political. A Man Called Horse shows female nudity, extensive male nudity from the rear and even genital glimpses, but is apolitical. Wedding Night opens with a nude bedroom scene. Thereafter, the film follows the nuptial arguments of a pair of newlyweds; the heroine is too frigid to consummate the marriage. That's rated GP; after all, the bride remains a devout Catholic, from beginning to end.

Me, Natalie and The Prime of Miss Jean Brodie both contain female nudity, and were rated M (the original MPAA designation equivalent to the current GP). Me, Natalie is apolitical, and Miss Brodie, though touching upon the rise of fascism in the 1930's, is largely a period piece of little ostensible contemporary

political relevance.

Many R films contain no more (and sometimes less) nudity than the above mentioned GP's, but their content is politically loaded. Getting Straight, for example, has one quick nude bedroom scene equivalent to the one in Wedding Night or Romeo and Juliet; but Getting Straight is sympathetic to youthful radicals, and is rated R. M*A*S*H has only a bit of comic nudity, but the film is wildly irreverent and iconoclastic. M*A*S*H is also rated R.

There are even subtler examples. The End of the Road contained only the briefest glimpse of genital nudity in a nonsexual situation (swimming), but was rated X. The glimpse was so fleeting, that my wife missed it entirely. The End of the Road, however, filmed American flags in several 'unpatriotic' contexts (draped around a neck, in dirty laundry, etc.), and the film hinted that the political-psychological morass of the United States was responsible for the mental illness of the protagonist. Carry It On contains absolutely nothing resembling sex or nudity, yet it is rated GP instead of G. Why? Because Joan Baez is a leftist, and she talks about 'revolution' in the film.

In contrast, The Chevenne Social Club, although avoiding nudity, has a plot worthy of a stag film. When a Texas cowhand arrives to take over a business in Wyoming that he has inherited, to his surprise, he finds that it is a brothel. The joke is milked for all it's worth. including several unmistakable seduction scenes. This film is also rated GP. After all, the cowhand's first reaction is to close the place down, and the girls are just as sweet as you could ask for. The film appeals to prurient interest, presents a distortedly glamorous view of prostitution, and resorts to killing and bloodshed at the end. Yet it receives the same classification as a sexless documentary. on a peaceful, politically leftleaning performer (Carry It On).

Catch-22 contains one shot of a nude woman in a non-sexual context. It is rated R. There is comparable nudity in several GP films; but the GP films don't defend desertion or declare war to be insanity, as Catch-22 does.

Although X rated, Joseph Strick's Tropic of Cancer, and Pier Paolo Pasolini's Teorema both contain equal or less nudity that many R's, and even a few rare GP's. For example, Women in Love was rated R, and contained explicit male genital footage. The Magic Garden of Stanley Sweetheart, rated R, contained extensive female nudity and explicit sexual orgies — however, the film came down very hard on drugs, which is probably what saved it from being an X.

Why are Strick's and Pasolini's films rated X? In these cases, I would guess that it has to do with the personal politics of the directors, rather than the content of their films. Pasolini is an avowed communist. Strick is loudly anti-war, and he went to court to challenge the right of

the MPAA to rate Tropic of Cancer at all, claiming that an X rating was a form of de facto censorship aimed at financially hurting a film so rated. (He lost in court.) In Boston last spring, Strick told me that 50% of all radio stations and newspapers refuse to advertise X-rated films, and except in a few rare cases, an X rating is likely to spell box-office disaster for a serious film.

I can think of one possible exception to the rating patterns. but maybe this is the proverbial exception that proves the rule. Zabriskie Point was rated R; strictly on the basis of the sexual content, it should have been an X, because of the inclusion of copulation in Antonioni's desert vision of love among youthful dropouts. However, Zabriskie Point received an extraordinary degree of advance publicity, partly because of the politically radical content of the film, but more so because of Antonioni's international stature as one of the finest artists of our times. In short, it looks to me as if the MPAA didn't dare rate Zabriskie Point X, because of the furor that may well have followed. People would have accused the MPAA of playing politics with the ratings - yet by most criteria, Zabriskie Point should have earned an X all the same.

What does it all add up to? Not only is the rating system as practiced sometimes a hoax; it can also be a weapon in certain instances, as any kind of regulation ultimately is, self-imposed or not. For the most part, the ratings seem to be geared at screening prospective audiences according to their political bias. R is for liberal, GP is for conservative. Since, as most would agree, liberals tend to be more permissive with regard to freedom of expression, it is no wonder that nudity and sexuality will usually fall into the liberal-R category, while restraint and modesty will fall into the conservative-GP category. But there are enough exceptions to these rules to render them highly dubious in deciding whether any given film contains sexually objectional material in the abscence of additional political information about the film. At the extremes of the rating system, differences between G's and GP's, or between R's and X's, are also sensitive to the political bias of the work.

Although it is clearly more palatable than most systems, let us consider for the moment, the ratings as a sophisticated form of censorship. Someone once observed that each society tends to censor what it fears most. Thus, the Soviet Union censors political (as well as sexual) content. Sweden censors only violence, but not sexual or political content. Denmark censors nothing. The United States, traditionally, has censored only sexuality; in a formal sense, this still applies. But the fact that the MPAA rating system often reflects general political information is a new development on the American scene. The political nature

(Continued on page 12)

DINO'S PIZZA AND SUB SERVICE.

FAST DELIVERY
REASONABLE PRICES
CALL 266-6381
6 PM-12 Midnight

MASS. AVE. IN BOSTON NEAR BEACON ST.

TECH SHOW 72

Potential <u>authors</u> and <u>composers</u> and everyone interested in learning more about TECH SHOW are invited to an informal meeting on <u>Thursday</u>, <u>Nov. 4</u>, at 7:30 p.m. in the Kresge Little Theatre. Refreshments will be served.



Concert: Sweet Baby Livingston...?

By Neal Vitale "Lazy Susan called me up She'd heard I stole the show In my reply, I lied a bit -And said I did not know."

> -Livingston Taylor, from "In My Reply"

Livingston Taylor is going to have to keep lying more than just a bit, to hide the fact that he is stealing the show from brother James and becoming THE member of the Taylor famly. With the forthcoming release of his second album, Liv, the reputation his first fine record gamered, a couple of excellent concerts at Jordan Hall, and lames Taylor's disappointing outing, Mudslide Slim, younger Liv is taking over the lead among the Taylors.

Saturday night, Livingston Taylor came back to his favorite Boston auditorium, Jordan Hall. And a good choice it was, as the intimate atmosphere suits his music perfectly. The hall is circular, and being only 20 rows deep, even seats in the balcony me good. An artist amid the modern-gothic cathedralesque irchitecture and warm wooded stage can develop a beautiful apport with the audience. Saturday night was just such a case.

To warm up the audience, Reeve Little and his troupe of Cambridge-Boston based backup musicians (including Peter Johnson, a very fine local gui-

tarist) treated everyone to an excellent set. Little is a competent guitarist- songwriter on his own, and the accompaniment of bass and (in varying combinations) flute, harmonica, and second guitar produced a good balance.

After a short intermission, Livingston Taylor came on, backed by a stand-up bass and, on a few numbers, piano. He ran through most of his first album. doing songs like "Doctor Man" and "Six Days on the Road". then introduced much of the new material from Liv. The musicianship was as good as usual; the song-writing shows someone who's been living and through a lot, a man who has matured considerably from his first record.

Interspersing many of his numbers with little monologues. he seemed to be enjoying the concert as much as the audience. At one point, he got into a long rap about the seasons turning at this time of year, talking about the leaves changing colors and falling and frost on the pumpkin and on and on with all the old made a group of people teel a cliches. He also commented that little better and warmer against it was the time of year when The Wizard of Oz is shown on television, and then went into "Somewhere Over the Rain-

evening came in other people's

songs that he played. After bringing the crowd to a dramatic peak, with everyone practically on the edge of their seats, he played his famous version of the Coke commercial (...I'll settle back with some smoke, and flipthe tab on a frosty bottle of Coke). He did a couple of Beatles' songs ("With a Little Help From My Friends" and "If I Needed Someone", the latter especially effective), a song by one of his idols, Ray Charles, entitled "Hallelujah, I Love Her So", and the Everly Brothers' classic "Dream". Livingston ended his set with a beautiful version of "Carolina Day" and exited to much warm, sustained applause. He returned to do a Chuck Berry tune, "Too Much Funky Business," then a version of "Dixie," to show "the good side of the South". Again, he left the stage and; although some of the audience left, he was called back to vet another encore - "Thank You Song."

Livingston Taylor left Jordon Hall early Sunday morning with a following all his own, having the chilly October evening. It's apparent that he will soon be recognized as one of the leaders of the "new" soft music, lyrically "romantic", musically gen-Some of the surprises of the tle, yet without much of brother James' anemia.

film:

The Last Movie

By Emanuel Goldman

A South American religious fiesta. A lunatic moyie director" ordering peasants about, shooting the fiesta with a straw "camera" and no film. A wounded gringo wandering around. Cut to the old west and an American crew at work with real cameras and film.

With a little effort, all the

pieces of Dennis Hopper's The Last Movie begin to fall into

place. The end of the film comes first, so everything that follows is to be construed as flashback. Since the storyline is fairly difficult to follow, a brief description is in order. "Kansas," the protagonist, has been working on an American western shot on location in South America. We see a violent gunfight, then we get to see how the crew staged it. Kansas, who likes the area, stays behind after the film is over, with a beautiful prostitute, Maria. Meanwhile, the bizarre "director" mentioned above is busy working on his "movie" with the local population: When a priest asks Kansas to intervene, due to the violence in the mock-director's scenario, Kansas attempts to show them how to fake scenes. The director rejects his advice, insisting that everything must be real in his "movie." Eventually, after a run-in with some rich Americans, a search for a gold-mine, etc., Kansas is drafted into the mock "movie" and made to play

a criminal who is killed in a sort

of ritual expurgation - and

remember, no faking allowed. So what has Hopper (Easy Rider) got up his directorial sleeve this time? To me, the most coherent interpretation of the film is as a political allegory of third world liberation. The concept of "movies" becomes a metaphor for freedom (democracy?) as propagandized by the U.S. ("Movies," a medium of mass communication, is an apt choice.) But the action in our movies is fake, while the Latin director's action is real. The director himself was an extra on the American crew's set, before starting his own revolutionary 'movie." The priest, at first strongly resistant to the revolution (he says "movies bring violence, and I don't like it"). finally comes round and takes active part in the fiesta. His final comment: "I just wanted to show them that the same morality that exists in the real church

can exist in the movie church after this game is over."

The precise nature of the political connection is intimated by the presence and behavior of the rich Americans, by the search for a gold mine by Kansas and a friend, and by the purchase and use of local people (the prostitutes being the most obvious example) and resources by Americans. Kansas (the name itself becomes a geopolitical metaphor) admires the countryside at one point and articulates a fantasy of setting up a hotel, and perhaps a ski-slope. Maria too has caught a materialistic attitude, asking at different times for a G.E. refrigerator, or a fur coat, and suggesting that Kansas build a swimming pool despite the proximity of a fresh mountain spring. Kansas' dying thoughts are on his gold-mine expedition; his last confession, to the priest, consists of one word: "movies."

Imperialism is the issue, and I suppose one need not insist on a strict economic-political interpretation; just the movie-making process in itself is a sort of mental-psychological imperialism. In a general sense, this is what Hopper is assaulting, on both allegorical and representational levels, by opposing a mock-movie which is real, to a real movie which is mock.

A discussion of the film would be incomplete without reference to the abundant Christian symbolism. Kansas is set up as a Christ figure (the name again resonates in this context, with a sound similar to "Jesus" and a geographic reference as in Nazareth). His prostitute is called Maria (as in 'Magdalene') and he is killed on a "movie" set which boasts a church sign including the name "Judas." There are many other references, but do they have a function? Here too. I feel the pull of allegory for as a Christ figure. Kansas atones for all our sins, taking upon himself the full brunt of third world vengeance, and the symbolic responsibility for the imperialism of his countrymen. As a Christ, he retains mortal aspects, including martyrdom, but he is not treated as divine deliberately so, for to have treated him in that way - to have suggested resurrection, for example - would have undermined the allegory by vindicating him, making the interpretation inconsistent if not untenable.

<u>-</u>CONTRACEPTIVES

We believe your private life should be your own. And when it comes to buying contraceptives, the hassle in a crowded drug-store isn't exactly private. So we've made it possible for you to get nonprescription contraceptives through the mail.

We specialize in men's contraceptives and we offer two of the most exciting ones available anywhere—Fetherlite and NuForm condoms. They're better than anything you can get in a drugstore. Imported from Britain, they're lighter, thinner, more exciting to use; and precision manufacturing and testing techniques make them as reliable as any condom anywhere. Made by LRI, world's largest manufacturer of men's contraceptives, Fetherlite (the best) and NuForm not only conform to exacting USFDA specifications, but are made to British Government Standard 3704 as well. We think you'll like them.

Our illustrated brochure tells you all about Fetherlite and NuForm. And about seven other American brands which we have carefully selected from the more than one hundred kinds available today. And we explain the differences.

We also have nonprescription foam for women and a wide variety of books and pamphlets on birth control, sex, population, and ecology.

Want more information? It's free. Just send us your name and address. Better still, for one dollar we'll send you all the information plus two Fetherlite samples and one NuForm. For four dollars you'll get the broch re plus three each of five different condom brands (including both Imports). All correspondence and merchandise is shipped in a plain cover to protect your privacy, and we guarantee your money back if you're not satisfied with our products. Why wait?

POPULATION PLANNING ASSOC. Box 2556-U, Chapel Hill, N. C. 27514	U	117
entlemen: Please send me: Yo	our free brock	ure and price
st at no obligation,Three sam	ples for \$1, .	Deluxe
ampler package for \$4.	s.	
•		

Address City State FREE COLLATION LEGAL SIZE PAPER

FOR INFORMATION PHONE 864-1816

OFFSET PRINTING

8:30am-12m, MON-FRI

26 CENTRAL SQUARE



Senegalese Nat'l Dance Company

Ritual dances colorfully combining tribal traditions, Arabic influence and modern hope of Senegal.

A powerful all male troupe dating back to the third century B. C.

A dance panorama of western Sahara desert folklore.

The world renowned troupe have performed exclusively for the Royal Palace in Phnom Penh for fourteen

India's famous musical family, masters of the Dhrupad, a style of raga singing.

Evenings(E) 8:00 P.M., Matiness(M) 3:00 P.M.

Prices for Dance Companies \$3.50, \$5.50 Price for Dagar Brothers \$3.00 Series Price (5 acts) \$15.00 All Seats Reserved

Special rates for groups of 20 or more. Group Reservations: 426-6741 Tickets: Out-of-lown Ticket Agency & box office, Aguarius Theatre, 413 Washington St. 482-0650.

ire aluatus irea

some call it a Bargain Center some call it a Survivor Shop some call it an Army-Navy Shop

WE CALL IT THE

BUDGET PRICED

at the TECH COOP

JUST CHECK OUT THESE VALUES

men's jeans . . .

Sanforized, cotton, waist sizes 29-36

C.P.O. SHIRTS

10.99

Wool plaids. Pile lined,

MEN'S BRIEFS

2 for 1.00

S-M-L-XL

Cotton irregs.

30-38

Selected Irregulars Hard-to-Find **Button-Down Oxford**

Nylon with

Orlon pile

lining, fur

trim bood.

The season's

warmest, most

or sage green.

S-M-L-XL.

popular outdoor parka. Navy blue



\$10-12,

cardigans ·

100% wool & pullovers. S-M-L-XL

BOMBER JACKETS 24.95

Heavy Duty Solid & Plaid

:P.O. SHIRTS



Assorted plaids, nylon/wool with front pockets. S-M-L-XL.



Long sleeve classics in permanent-press blends,

Sizes 14½ to 17. Save more by buying three.

White, yellow, blue, green, and tattersall checks.



books:

First Aid for Future Shock

By Paul Schindler Beyond the Stable State, Donald A. Schon \$7.95)

In a vein made very familiar by Alvin Toffler in Future Shock, Schon begins by describing the "loss of the stable state" in human affairs. But there are major differences between the two books. As Toffler put it (on p. 487, the last page of the text): "... the basic thrust of this book is diagnosis.

For diagnosis precedes cure, and we cannot begin to help our-(Random House, selves until we become sensitively conscious of the problem." Toffler's elengthy tome, published by Random House in July of 1970, did that, clearing the way for Schon.

Schon spends 22 pages doing what Toffler does in 487, and he left me as convinced as Toffler did. It doesn't really take that much proof to establish the fact that there are very few stable

points upon which to hang a life or an identity in the 20th century.

Schon's point of departure is his suggestion of ideas on what to do in order to increase the likelihood of survival in this new social condition.

The diffusion of ideas, it appears, has changed its process in recent years, and this change is indicative of the loss of the stable state. The centerperiphery method, in which central establishes an idea, and then trains controlled peripheral agents to diffuse it, is based on assumptions of social stability which no longer correspond to reality.

Thus, organizations which resemble this model are going to have to change basic structure. or accept total irrelevancy. Taking the specific example of establishment and promulgation of public policy in the U.S. federal government, Schon points out in lurid details its slide into ineffectuality.

Then, in a fit of uniqueness, Schon proposes some seemingly workable solutions for the problems. Scientism, and the rational-experiment model of problem solving, at least in areas of public concern, must be discarded. Past experience, theories and laws are never completely applicable to the here and now, as the rational-experiment model states. The only workable models use past experience merely as a projective model which can suggest ideas about the present. The formulation and adaptation of policy must be by either systems analysis or 'existential'' knowledge (author's definition of existential), both of which are the only known systems of knowledge which concede as a basic point that there is more change and more information involved than can possibly be coped with in the process of making a decision.

If the problems of future shock upset you, then Beyond the Stable State offers hope insofar as it proposes a plan for coping with and surviving the new wave of impermanence.

Available at the Tech Coop

Ratings

(Continued from page 10) of the rating system is a symptom of the fact that American society is beginning to fear political expression in the arts and elsewhere. These ratings are a first warning signal. I don't believe the public would accept political classification of the it is practiced properly. In its arts, if it were generally known. In any case, the ratings should be identified for what they are, so that the public can decide whether it wants such a system.

My guess is that people want the ratings to do what we all thought they were supposed to do in the first place, and nothing more. In order for a rating system to work, there is crucial necessity for explicit, welldefined guidelines as to what content merits what rating. No ambiguities or arbitrariness can be accepted in this matter. If non-genital nudity means GP, stick to it. If genitals mean R,

stick to that. If copulation means X, stick to that. If obscenity is a factor, let there be explicit guidelines here, as well.

Let me emphatically state that I personally believe the rating system has the potential to be of great value to the public, if conception, the system has the virtue of incorporating the civil libertarian notion that "consenting adults" can be exposed to sexually controversial material, whereas adults who reject such material can easily avoid it. If a film is rated X, the viewer ought to know what he's in for. But only if explicit guidelines are articulated and strictly observed, can the public be effectively served by these ratings. If, as I do not believe to be the case, political implications are indeed consciously considered by the MPAA, let them so state and place it before the public.

Featuring Chinese Films (With English Subtitles)

Mon - Fri

2:30, 4:30, 6:30, 8:30, 10:30

Sat.

12:30, 2:30, 4:30, 6:30, 8:30, 10:30

1:00, 2:45, 4:30, 6:30, 8:30, 10:30 EXCLUSIVE SHAW BROTHERS PRODUCTION

STARTING MISSION IMPOSSIBLE TODAY:

NEW PICTURE EVERY FRIDAY!!

Telephone: 423-7415 84 Beach Street CHINATOWN

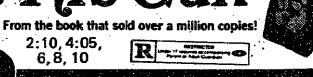
ONE OF THE GREAT FILMS OF OUR



Dalton Trumbo's

A BRUCE CAMPBELL PRODUCTION JERRY GROSS PRESENTS A CINEMATION INDUSTRIES RELEASE **NOW!**

2:10, 4:05, 6, 8, 10



theatre:

Dramashop's 9-day wonder

By Robert Fourer

Only halfway through the fall term, Dramashop has already presented us with two of its nine-day wonders-and there's a third yet to come.

The second of these pairs of one-acts, presented in Kresge Little Theatre last weekend, followed the programming of the first: to start off, a moderately abtruse playlet, positing an exceptional situation and proceeding only half-heartedly along the lines of conventional marrative drama; to close the evening, a realistic mini-drama in a recog-

nizable setting. Arrabal's The Labyrinth, the starter this time around, takes place at a clearing in an immense labyrinth of East Campus gray blankets (arranged for the occasion by Bruce Schwartz). The abyrinth's occupants, it develops, are mostly prisoners left to wander through its blankets forever with scarcely a chance of finding their way out; their oppressors are the owner of the. blankets, his scatterbrained daughter, and a strange system of courts which travels through

the maze. It takes no great insight to see that The Labyrinth was meant as a parable of a sort of bureaucratic justice; the audience caught on to the fact pretty fast. Unfortunately, the play left more than a few people in frustrated confution, wondering what all the strange and varied goings-on were supposed to mean. It seems this sort of problem always accompanies this sort of play the audience feels impelled to perform a textual analysis that

classified advertising

DEMONSTRATORS NEEDED. Young company needs persons to demonstratè manual data retrieval systems at scientific exhibit November 3, 4, 5. Good pay. Call 262-0400.

NASSAU-CHRISTMAS. From \$109. Delux beach-front hotel, 12/23-29, 14/27-1/3. Open only to MIT Wellesley. Call Uni-Travel Corp. 599-0287.

20%-50% OFF ON ALL STEREO EQUIPMENT, stereo components, compacts, and TV's. All new in factory sealed cartons, 100% guaranleed. All major brands available. Call Mike any time, 491-7793.

W BUS FOR SALE. Good condition, radio. \$800 or best offer. Call Jerry P. 261-1759 or x3788.

The most Meaningful Semester you'll ever spend... could be the one on World Campus Afloat

Sailing Feb. 1972 to Africa and the Orient

Inough a transfer format, more than 5,000 students from 450 campuses have participated for a semester in this unique program in inter-Malional education.

WCA will broaden your horizons, literally and guatively . . . and give you a better chance to make it—meaningfully—in this changing world. toll study at sea with an experienced cos-Repolitan faculty, and then during port stops Note that I study the world itself. You'll discover that no matter how foreign and far-away, you have a in common with people of other lands.

WCA isn't as expensive as you might think; he've done our best to bring it within reach of nost college students. Write today for free

RICHERS: Summer travel with credit for teachas and administrators.

Write Today to: Chapman College, Box CC26, Orange, California 92666

they would find difficult with There followed Chekov's The the script before them and a week's free time. This sort of attention is better devoted to works that are meant to be read - Kafka's novels, on much the same topic, make much more profitable and enjoyable analy-

The play, however, is for performance in a theater, and it ought to keep the audience sufficiently engrossed that no one stops to think what it is about. Any ulterior significance of words or situations must be conveyed through characterization of the roles and staging. This is the challenge of any play, but here the task is complicated by an unnatural situation and unfamiliar characters. It is often necessary to overplay the parts, giving the characters a wealth of distinctive mannerisms to make them real; an elaborate production often helps. (one full length play along similar lines is de Ghelderode's Pantagleize, which employed the entire breadth and depth of a Broadway stage in a successful production four years

One cannot fairly demand so much of director Jeffrey Meldman, who had only a cramped stage and nine days to work with. Still, only Leslie Haws as Micela gave her role the energy it required, pacing madly about the stage like a hairbrained stewardess in a falling plane explaining carefully to a passenger his chances of survival. By comparison, the other actors seemed to

just stand and talk. MGM PRESENTS eter Rabbit NOTALES OF **POTTER** AT 2:00 3:30 5:00 6:30 8:00 9:35

Brute, directed by Cynthia duPont, which poses less of a challenge but comes off better. Paradoxically, this one-act farce requires a style not unlike that demanded by Arabel-fast pacing and energetic characterization. In this case, however, its purpose is to keep the absurdity of the situation from becoming too evident, for the characters and situation are commonplace

almost to the point of banality. Laura Ingersoll, as a flirtatious widow in mourning, and James Czajka, her creditor and unwitting suitor, played their parts splendidly, working their final confrontation up to a frenzy that never let down. Credit also belongs to Andy Piecka, as a crotchety old footman who can't understand his mistress' constant bewailing of her late unfaithful husband.

The third evening of one-acts will be Friday and Sunday nights, November 19 and 21. Tryouts will be Monday evening, November 8, at 7:30 pm in Kresge Little Theatre (anyone interested who cannot attend should call Prof. Everingham at x 2908).

A professional **ABORTION** that is safe, legal & inexpensive

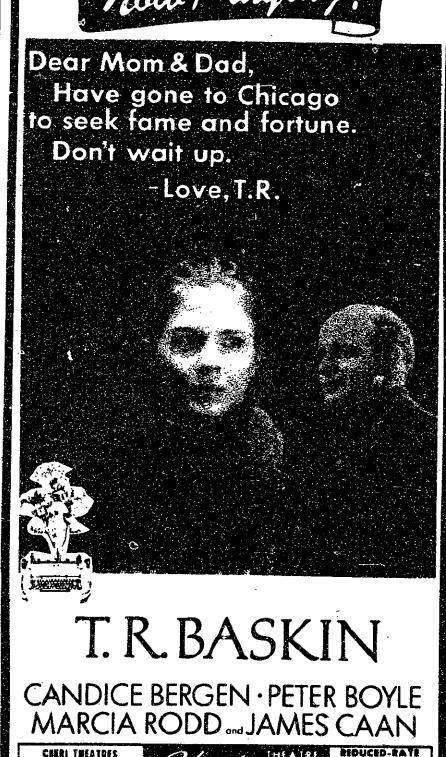
can be set up on an outpatient basis by calling

The Problem Pregnancy Referral Service (215) 722-5360

24 hours - 7 days for professional, confidential, and caring help.

urt architecture film 50% to 90% Off on All Titles Widen Planning design shelfworn, slightly damaged, overstock humanities. Wh patitical science November 4 10:00 - 8:00 COMMUNULLA November 5 10:00 - 4:00 namenuta on Massachusetts Avenue) information education economics physics music





Arrests climax DC protest

(Continued from page 1) State Department sources indicated that the plan was unac-

ceptable to the US government, precisely because the total withdrawal of American military support would cause the collapse of

Thieu's government.

Davis told the crowd, which by this time totalled several hundred who had been standing on the muddy south slope of the Washington Monument for over three hours, that the group would later march to the White House to escort Nixon to the phone, not to disrupt traffic or confront the police. "We will be taking the key to every POW camp in Vietnam and giving that key to Richard Nixon," Davis asserted.

The phone call came through by cable from Paris at 3:40 pm, and was answered at a white phone connected to the loudspeaker system by Father Groppi, who spoke with people identified as Nguyen Minh Tien of the PRG and Nguyen Van Vy of the DRV. Tien spoke first and offered greetings to the group assembled in Washington, and then again offered the sevenpoint plan described above. Vy, speaking through an interpreter, aligned himself with Tien's remarks and concluded by expressing the wish that he could someday speak in person with those at Tuesday's rally.

The arrests began at approximately 5:15 pm, a few minutes after the group crossed police lines. Those sitting in the street were herded into a small circle by police on motorcycles. Some in the group were manhandled out of the small circle of those wishing to be arrested by members of the Metropolitan Police Department. Dellinger, who was manhandled out of the group, later-managed to talk his way back in, and was arrested along with Davis, Groppi, and Carol Kitchens. By 6:15 all that remained was the backing material from the Polaroid pictures taken by the CDU of each person arrested and his arresting officer.

The entire DC police force, as well as 2000 Marines and 4000 National Guardsmen, had been mobilized for Monday's activities. After the rains came, the Marines stood down, but the police and National Guardsmen remained on call.

Police were prepared to cope with many more demonstrators than actually appeared. They wanted no repeat of last May's performance, during which they were faulted for unconstitutional arrest procedures, assaulting para-medical personnel, and inflicting cruel and unusual punishments on prisoners by not properly housing and feeding

harvard sq.

864-4580 Thru Mon.

Fellini's THE CLOWNS 2:15-6:10-10:00; THE CONFES SION Yves Montand, Simone Sig-noret 3:50-7:45. No film showings Fuesday, November 2.

BRATTLE SQ.

876-4226 Thru Tues: Marcel Carne's CHILDREN OF PAR-ADISE Jean-Louis Barrault 5:15 and 8:30 only.

864-0426

10th Month. DeBroca's THE KING OF HEARTS 6:30-9:45 Weekend Matinees 3:10 & GIVE HER THE MOON 8:15 Wknd Mat. 4:55.

864-0426 Thru Sat. GRAND HOTEL 6:00-10:00 & DIN NER AT EIGHT 8:00 Sat. Mat. 4:00 Sun.-Tues. SAN FRANCISCO Spencer Tracy, Clark Gable 5:25-9:55 & NORTH BY NORTHWEST Cary Grant 7:30 Sun. Mat. 3:05.

them. An agreement signed with the Medical Committee on Human Rights was carried out to the letter.

At a press conference on Wednesday, the PCPJ announced that the arrests had signalled the end of phase one of the "evict Nixon" campaign. Phase two will involve a series of "people's panels" around the country, and activity in the primaries next spring. It is the intention of the PCPJ to serve an eviction notice on Nixon and members of his administration wherever they appear in the future.

John Froins, one of the Chicago Seven, indicated that plans are underway to hold a war crimes trial in Cambridge, Mass. to try such people as Samuel Huntington of Harvard Universi-

SUPERIOR TERMPAPERS

185 Windsor Street Cambridge, Mass. 02139

WE ARE QUALITY ORIENTED

ena

SUB EATING CONTEST Register Now !!!!! 65 Mass. Ave.

(Corner of Comm. Ave)

266-7548 9am-1am Mr. And Mrs. Douglas Hanson, Prop.

Win Lena's Sub-Eating Sweatshirts Enter a team- Win the Trophy (now on display)

(617) 491-9399

KENDALL SQUARE OFFICE



In The New CAMBRIDGE GATEWAY MALL



KENDALL-HARVARD-PORTER SQUARES **Telephone 492-4023**



Sailors win Fowle Trophy

Highlighting last weekend's sailing action was the Leonard Fowle Trophy Regatta, an annual event sailed for the New Eneland Four-Crew Team Racing Championship. Displaying exemplary teamwork, MIT's varsity sailors again marked themelves as the team to beat in New-England, as they outsailed a tough Tufts contingent to take the title.

in contrast to conventional dinghy racing, which is essentialy an individual effort, team racing calls for coordination among the various team members racing, and makes important use of practiced cooperation in obtaining and maintaining an advantage over one's opponents. In the Fowle Regatta. four crews are entered from each participating school, with victory in each race going to the team with the lowest total score for its four boats. The regatta was sailed at MIT.

Saturday's first round action vitted each of the five teams against every other in roundrobin competition, with the top four squads advancing to the second round semifinals. Northeastern went 0-4 in its races and was eliminated, while MIT. Tufts, Harvard, and Coast Guard moved up.

The semifinals (best two-of-three races) matched MIT against Coast Guard and Tufts versus Harvard. The Tech mariners took the New London delegation 2-1, while Tufts blanked Harvard 2-0, setting the stage for the final match-up:

The final series, the one to decide the championship, was a best three-of-five contest, sailed on Sunday in heavy winds. Both the MIT and Tufts squads featured strong depth, an important factor in team racing:

Tom Bergan 72, Alan Spoon 73, Larry Bacow 73, and Steve Cucchiaro '74 made up the Tech contingent, while Manton Scott, Chris Pollack, Sandy Vietor, and George Horton sailed for Tufts.

50% to 90% Off on All Title

race, but the engineers came back strong in the second, and led at the weather mark, with first, second, fifth, and sixth positions. They held to win with slots two, three, four, and six at third place finish in an invithe finish, to even the score at one race apiece.

MIT again took the start of the third race, and Bergan and Bacow, and Cucchiaro again Cucchiaro were one-two at the windward mark, with Spoon and Bacow in six and eight. Coming down to the finish, only a foul could win for the Tufts sailors, so Bacow sailed his man way off the course, preventing attempts to force a foul, and clinched the victory.

In the fourth race of the series, the engineers lost the start, and rounded the weather ond in an eleven-school invitamark in second, sixth, seventh, and eighth positions. On the ensuing legs Cucchiaro moved up to fifth and held that position, with Spoon second, Bergan seventh, and Bacow eighth heading into the final leg of the race.

Cucchiaro and Bacow worked on Horton, until Steve broke through, gaining a valuable place. Nearing the finish, Spoon, in a great tactical move, dropped back from second place to hold off Pollack and allow Bergan to finish in second, and then crossed the line in third himself. This gave the MIT squad five points, meaning that Cucchiaro and Bacow could finish no worse than fifth and seventh if the team was to win the race. At that point, Tufts still had a winning combination of places, and only quick work by Cucchiaro and Bacow could save the race. Very near the finish, Bacow held off Vietor and forced him to the wrong side of the line. Cucchiaro worked into a fifth place finish, and then Bacow nosed across in sixth, to give MIT a winning margin, the race, and the championship. The title is a tribute to the excellent teamwork exhibited by all four of the Tech sailors, and the

Two fouls cost MIT the first Tufts contingent admitted after the racing that they had been clearly outsailed.

> On Sunday, Lynn Roylance. '72 and Shelley Bernstein '74 sailed the women's team to a tational regatta at Jackson. Lynn took second in A-division.

> On Monday, Bergan, Spoon, teamed to place second in the Hap Moore Trophy Regatta, a combined sloop-dinghy regatta at Coast Guard. Spoon and Bergan combined to place second in the dinghy division. The schools, in order of finish, were Tufts 94, MIT 106, Harvard 109, Coast Guard 132, NY Maritime 138, and Yale 151.

> The freshman squad took sectional at Harvard on Sunday. finishing behind Yale. Chuck Tucker and Rob Parker sailed for the frosh, both finishing second in their divisions.



Today Soccer(JV, F) Bryant and Stratton, home, 3:30

Saturday Sailing(V) MIT Open, home, 10:00 Cross Country(V, JV, F) Easterns at Franklin Park, 1:00 Soccer(V) Colby, home, 2:00

Saturday-Sunday Sailing(W) Victorian Coffee Urn Trophy, at Radcliffe

Sunday Sailing(V) Donaghy Bowl at Holy Cross, 9:30 Sailing(F) Invitational at Boston U., 9:30

SPORTS

Thinclads runner-up to Tufts, tromp Williams

By Mike Charette

The Tufts cross-country team defeated MIT and Williams last Saturday at Franklin Park by a score .of 32-35-58. The Tech harriers showed considerable improvement over last year. At that time, both Tufts and Williams, using essentially the same personnel, soundly defeated the MIT runners. The thinclads' record now stands at

Tufts' Moynihan and Amer, probably the best running duo in New England, led the race for most of the time, and they both finished with a swift 25:11 clocking. Bob Myers '72 and John Kaufmann '73 finished third and fourth respectively, and were followed by two Williams runners. Meanwhile. MIT's fourth and fifth men, seniors Pete Borden and Craig

Lewis, had been passed by Connolly of Tufts, less than 800 yards before the finish. This burst of speed from the 4:12 miler provided Tufts with its winning margin.

The harriers will next compete in the Easterns on Saturday at Franklin Park, at 1:00 pm.

The results were:

Tufts (32): 1) Moynihan, 25:11; 2) Amer, 25:11; 8)McDonald, 26:03; 9) Connolly, 26:06; 12) Mabee, 26:38

MIT (35): 3) Myers, 25:25;4) Kaufmann, 25:39; 7) Blumer, 25:58; 10) Borden, 26:12; 11) Lewis, 26:23

Williams (58): 5) Haug, 25:47; 6) Farwell, 25:48; 14) Potter, 26:53; 16) Cleaver, 27:08; 18) James, 27:58

LEGAL AND SAFE

\$129

ACHIEVE ALTERED STATES OF CONSCIOUS-NESS WITHOUT DRUGS OR A LIFETIME OF DISCIPLINE

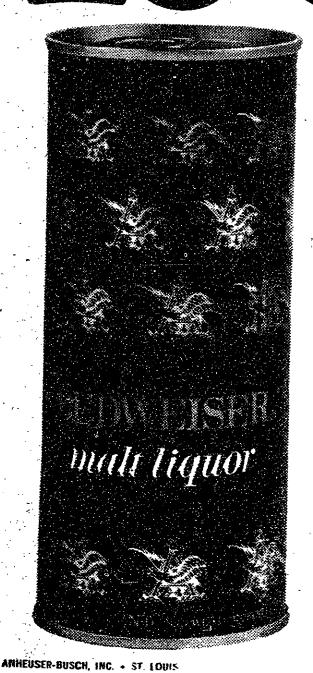
ALPHA/THETA CYBORG is a miniaturized electro-encephalograph which detects certain brain waves you produce called Alpha and

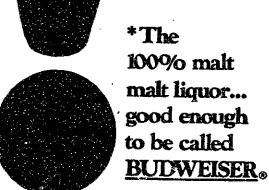
Theta.

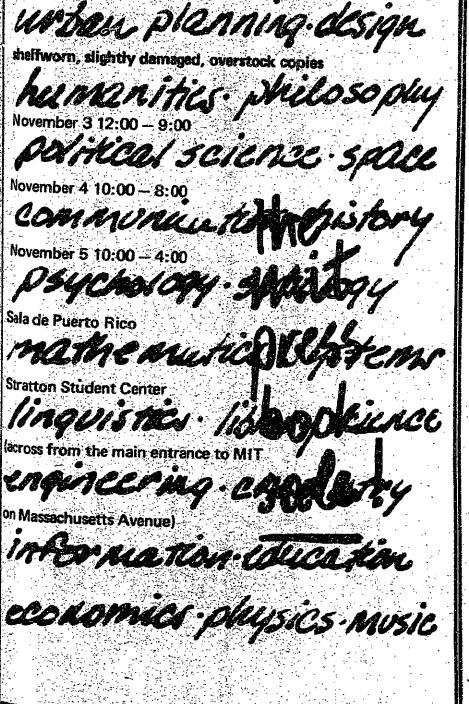
"The Alpha State is described by meditative philosophers as euphoric, profound and highly desirable; Theta patterns are related to creativity and imagery."

ALPHA/THETA CYBORG helps to identify and control these states of consciousness by feeding back sounds and flashes of light whenever Alpha or Theta patterns are occuring.

For more information or Personal Demonstration Cambridge, Mass 02139 BIO-FEEDBACK of CAMBRIDGE 354-0851 (24 Hours) 411 Norfolk Street







art architecture film



SAE retains football crown

By Brad Billetdeaux

Sigma Alpha Epsilon won the IM football championship again last Saturday in a close shave with previously unbeaten Lambda Chi Alpha, 4-0. SAE, the only remaining undefeated team; thus added another triumph to the history of their football dynasty. The IM trophy has not left 484 Beacon St. in six years!

nated by defense, as the methodical and aggressive SAElors thumped LCA's offense. Led by Tom Bissell '72 and Bill Corwin '72, SAE's defensive line held LCA to -32 yards rushing. SAE's

By Mark Webster

for the Intramural Tennis Cham-

pionship, each scoring seven

points in the tournament held

on October 16 and 17. The tie

means that the title will now be

decided by a match between the

with representatives in the sin-

gles and doubles semifinals.

However, Mike Stauffer of DTD

defeated another Chem E. sin-

gles player in the quarterfinals to

finals left to be played on Sun-

day, the Delts still trailed Chem

E.'s graduate students by two

points. The semifinals doubles

match between Dagate and

Wood of DTD and Rogers and

Curmit of Chem E. appeared to

be the crucial match. The Delts

won 6-4, 6-2, and this, coupled

with Mike Stauffer's singles win,

With only the semifinals and

keep his team in contention.

On Saturday, October 16, Chem E. got off to an early lead

two teams.

Delts, Chem. E. tie for

intramural tennis title

Cochi '73 and Steve Reber '74 gave LCA only 22 yards in the air. In total offense then. Lambda Chi had -10 yards for the entire game - quite a tribute to the SAElor defense.

In what was a rare football battle, the Lambda Chi's scored all the points against themselves. A bad snap from center over the head of quarterback Charles Snell '71 into the endzone gave The game was totally domi- SAE a safety in the first quarter. Then, in the second quarter, Bob Simonton '72 caught a long punt that was over his head. He had been running back towards his goal line looking over his shoulder. He lost track of where defensive secondary of Steve he was and caught the ball on

In the other singles semifinal,

6-1. Thus the Delts were tied for

singles, or a Dagate-Wood vic-

Club 'A' team of Chang and Hiu,

the other doubles finalists, to

However, Anderson over-

powered Stauffer 6-0, 6-2 with

the fine serve and volley which

he displayed throughout the

tournament, to win the singles

title. The CSC team also went on

to win in the doubles final, 6-1,

6-3, to hold the Delts to seven

points and a tie with Chem E.

Ashdown and Club Latino tied

for third place with five points

each, and CSC 'A' was one back

with four. Fifty-three players,

including twenty-three singles

entries and fifteen doubles

teams, competed in the tour-

nament, representing seventeen

clinch the championship.

In the final analysis, the com-

plete failure of the LCA offense to move the football was the decisive factor of the game. In fact, the SAE defense was so stingy that all but three LCA offensive plays in the first half were played on LCA territory. An inspired Lambda Chi defense, keyed around the pass rushing of John Lippitt '73, blanked the SAE offensive unit, a squad that averaged in excess of 20 points per game. SAE The Lambda Chi's held time after time inside the 10-yard line.

This combination of gaining possession deep within their own territory and a weak offensive Teams from Delta Tau Delta Paul Anderson of Ashdown beat attack, plus the pressure from and Chemical Engineering tied Sam Schayek of Chem E., 6-1, the SAE defensive unit, was undoubtedly the cause of the erfirst place and needed only a win rors that cost LCA the champiby Stauffer over Anderson in onship. In total effectiveness, SAE was only equal to LCA, in tory over the Chinese Student that both teams failed to score. But by playing flawlessly, as is their trademark, SAE retained the crown for yet another year.

the 1-yard line. Unable to reverse field, his momentum carried him into the endzone where an alert SAE defender tagged him for two points and another

compiled 203 yards in total offese, but none where it couted.

SPORTS

Booters beat BC for season's 3rd shutout

By Nakir Minazian

The varsity soccer team registered its third shutout in its last four games on Wednesday by beating Boston College, 1-0. Despite outshooting the Boston College visitors 26-10, the Tech offense stalled at times, and another superior defensive effort by the Tech fullbacks earned the shutout.

The booters opened the play early in the game by coming on with good ball control and a well-played short-passing game, keeping the ball on the offensive half of the field for most of the period. However, they failed to convert many of the passes into and around the goal area and missed several good scoring opportunities. In the second period, the story started off much the same, but with Boston College starting to mount somewhat of an attack; the Tech fullbacks could not control the ball well at midfield. For most of the rest of the game, this situation pre-vailed, with the two Tech halfbacks pressing up with the offense, and a long clearing kick from the BC fullbacks catching them up for a BC fast

With about 30 seconds left in the first half, center forward Rick Eskin '72 dribbled into the penalty area and beat a defender. Setting to shoot he was stopped by a BC handball and awarded a penalty shot, but failed to convert it, leaving the score at 0-0 at the half.

Events took a drastic turn for the worse in the third quarter, with the Boston College booters taking most of the control of the game. The BC defenders took control with long clearing passes to their line, but some good running and tackling by the Tech defenders, especially by center fullback Eric Barklis '74, staved off the attack. Offensively, the Techmen were stalled. though, and no combination that Coach Bill Morrison tried could get the short passing and ball control game that has worked so well this year back to normal.

Stop rust before if starts on your new car. With Ziebart rustproofing.

W.F. LACEY & SONS 50 Mystic Ave. Medford, Mass. 396-2883 Absolute rustproofing

Darkroom

Lenses

Film

Equipment

up the middle of the field and not spread out by playing the: ball to the wings or halfbacks. With about five minutes to go in the game, the Techmen really came to life, and it was almost too late. Center foward Rich Straff '74 made a fine headball shot from 15 vards out off a halfback cross which almost headed in. Finally, at about the three-minute mark, right wing Esref Unsal '75 took a pass and moved down the right wing into the corner. At the edge of the penalty area, he was pushed off

It wasn't until late into the

fourth period, when the booters

started to realize that they were

being tied by a much weaker

team that they started to move

again, but even on these attacks.

the Techmen tended to crowd

the ball, yielding an indirect kick, about 5 yards out from the end line. Halfback John Kavazanjian '72 sent the kick across the goal area to foward Eskin whose head shot was saved by the BC goalie. The attempt to clear the rebound was blocked and Unsal picked up the loose ball and drilled it into the upper right goal corner for the score. Last Saturday, the Techmen had their shutout streak interrupted by Springfield College at Springfield 3-0. Despite playing

without the services of two starters, the booters held a powerful Springfield team to 1-0 for most of the game, before a Parents' Weekend crowd of several hundred.

Masters Degree Programs in Systems Engineering at **Boston University**

₹@#@>>

Interviewing

November 15, 1971

295 HUNTINGTON AVE.

BOSTON, MASS. 02215

(617) 267-3000

WE GIVE RESULTS

subscription rates:

d class postage paid at Boston, Massachusetts. The Tech is published week during the college year, except during college vacations, and once the first week in August, by The Tech, Room W20-483, MIT Student, 84 Massachusetts Avenue, Cambridge, Massachusetts 02135. Tele: Area Code 617 864-6900 extension 2731 or 1541. United States Mail iption rates: \$5.00 for one year, \$9.00 for two years.



SERVICE SALES - PARTS EUROPEAN DELIVERY SPECIALISTS WE MAJOR IN PERFECT SERVICE

DALZELL MOTOR SALES &

NEXT TO RAYMOND'S CYE BLOCK FROM RTE. 128

PENTAX

SPOTMATIC

\$155.00 & UP

805 PROVIDENCE HEWY. 329-1100

ames R. Brine, Inc.

(Our only location)

pulled DTD even.

29 Brattle Street

Harvard Square - 876-4218 SPORTS EQUIPMENT and APPAREL for the ENTIRE FAMILY

different teams.

HOCKEY - SKATES - CCM, BAUER

STICKS - KOHO, HESPELER, TITAN, NORTHLAND VICTORIAVILLE, MONTREAL SURPRISE

EXTREMELY REASONABLE PACKAGE DEALS INCLUDING FIBERGLASS SKIS, SAFETY BINDINGS, AND POLES

SKIING - HEAD, ROSSIGNOL, K2, TRAPPEUR, RAICHLE

SOCCER - BASKETBALL - FOOTBALL TROPHIES AND ENGRAVING WOMEN'S WEAR - WHITE STAG, DUOFOLD, BRITISH VOGUE, ASPEN "Better Buys at Brine's"

Lowest Discount Prices on ALL Photo Equipment and Supplies 436 Mass. Ave. - Arlington Center

Only 7 minutes from Harvard Square Tel, 643-1463